Jack E. Jirak
Associate General Counsel

Mailing Address:
NCRH 20 / P.O. Box 1551
Raleigh, NC 27602

o: 919.546.3257
f: 919.546.2694

jack.jirak@duke-energy.com

April 30, 2019

VIA ELECTRONIC FILING

Ms. M. Lynn Jarvis
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, NC 27699-4300

RE: Duke Energy Carolinas, LLC's Supplemental Testimony in Fuel Charge Adjustment Proceeding
Docket No. E-7, Sub 1190

Dear Ms. Jarvis:

Enclosed for filing with the North Carolina Utilities Commission are the Supplemental Testimony, Exhibits and Workpapers of Duke Energy Carolinas, LLC witness Kimberly D. McGee in the above referenced docket. I will deliver 15 copies to the Clerk's Office by close of business on May 1, 2019.

Please contact me if you have any questions.

Sincerely,

Jack E. Jirak

Enclosures

cc: Parties of Record

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1190

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	**SUPPLEMENTAL TESTIMONY**
Pursuant to G.S. 62-133.2 and NCUC Rule	)	**OF KIMBERLY D. MCGEE FOR**
R8-55 Relating to Fuel and Fuel-Related	)	**DUKE ENERGY CAROLINAS, LLC**
Charge Adjustments for Electric Utilities	)	

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kimberly D. McGee. My business address is 550 South Tryon Street, Charlotte, North Carolina.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes, on February 26, 2019, I caused to be pre-filed with the Commission my direct testimony and 6 exhibits and 14 supporting workpapers.

Q. YOUR SUPPLEMENTAL TESTIMONY INCLUDES 5 REVISED EXHIBITS AND 3 SUPPORTING WORKPAPERS. WERE THESE SUPPLEMENTAL EXHIBITS AND WORKPAPERS PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes. These exhibits and workpapers were prepared by me and consist of the following:

McGee Revised Exhibit 1: Summary Comparison of Fuel and Fuel-Related Costs Factors.

McGee Revised Exhibit 2: Calculation of the Proposed Fuel and Fuel-Related Cost Factors.

McGee Revised Exhibit 3: Calculation of the Proposed Experience Modification Factor ("EMF") rate.

McGee Revised Exhibit 4: MWh Sales, Fuel Revenue, and Fuel and Fuel-Related Expense, as well as System Peak for the test period.

Revised McGee Exhibit 6: December 2018 Monthly Fuel Reports.

Revised McGee Workpaper 7a: Calculation of Allocation percentages based on Normalized Test Period Sales.

Revised McGee Workpaper 12: Weather Normalization Adjustment.

Revised McGee Workpaper 13: Customer Growth Adjustment

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the revised rates reflecting the impacts related to six updates to numbers presented in my direct exhibits and workpapers. The first update relates to the wholesale weather normalization adjustment used in the calculation of normalized test period sales shown on Exhibit 2, Schedule 2, Exhibit 3 and Exhibit 4 and is described further below. The second update relates to a revised Customer Growth adjustment used in the calculation of normalized test period sales shown on Exhibit 2, Schedule 2, Exhibit 3 and Exhibit 4 and is described further below. The third update relates to an inadvertent scrivener's error when picking up the (over)/under balance for the residential class from the April 2018 Monthly Fuel Reports, shown in Exhibit 3, pages 1 and 2. The fourth update relates to the proposed EMF increment for the experienced under-recovery of fuel and fuel related costs, pursuant to NCUC Rule R8-55(d)(3), which allows the Company to incorporate the fuel and fuel-related cost recovery balance up to thirty (30) days prior to the hearing. The Company elects this option and supplements the direct testimony and exhibits to include the fuel and fuel-related cost recovery balance as of the 15 months ended March 31, 2019. The fifth update

is to reflect the final total system peak kWs of 18,875,799 on Exhibit 4, Line 8. The sixth update is to include a revised December 2018 Schedule 3 – Purchased Power and Interchange System Report, page 3 of 4. A version that had been subsequently amended was inadvertently included in Exhibit 6 - December 2018 Monthly Fuel Reports.

Q. PLEASE EXPLAIN THE REASON FOR UPDATING THE WEATHER NORMALIZATION ADJUSTMENT.

A. During a subsequent review of the weather normalization calculation, an error was discovered in the model's calculation of the wholesale adjustment amount. This correction, as shown on Revised McGee Workpaper 12, resulted in a 129,467 MWh reduction in the wholesale adjustment, thus reducing the system adjustment as well. However, there is no impact to customer rates due to this update. System normalized sales are only used on Exhibit 2, Schedule 2, which are filed for information purposes only.

Q. PLEASE EXPLAIN THE REASON FOR UPDATING THE CUSTOMER GROWTH ADJUSTMENT.

A. Public Staff identified a number of recommended adjustments in the calculation of the customer growth that the Company agreed were necessary, resulting in a change of 87,739 in total NC retail MWhs. In addition, the SC residential regression model has been updated to use weather adjusted values for energy usage during the test period instead of billed values. The revised system MWh adjustment for customer growth is 419,697 MWhs, an increase of 110,554 MWhs.

Q. HOW DID THE FUEL AND FUEL-RELATED COST RECOVERY BALANCE CHANGE DUE TO THE CORRECTION OF THE SCRIVENER'S ERROR REFLECTED IN APRIL 2018 ON EXHIBIT 3?

A. The under-collection balance as 12/31/2018 increased by $26,999 due to the correction of the clerical error reflected in the residential class.

Q. HOW DID THE FUEL AND FUEL-RELATED COST RECOVERY BALANCE CHANGE IN THE THREE (3) MONTHS BEING INCORPORATED?

A. The Company experienced an under-collection of $29,483,760 during the months January through March 2019. As shown on Revised McGee Exhibit 3, the incorporation of the update test period under-collection balance resulted in an under-recovered balance at March 31, 2019 of $87,165,106.

Q. WHAT IS THE RATE IMPACT OF THESE UPDATES?

A. The NC Retail Total Fuel Costs were increased by $ 29,263,025 from the amounts filed in my direct Exhibit 2, Schedule 1, page 3. The components of the proposed fuel and fuel-related cost factors by customer class, as shown on Revised McGee Exhibit 1, are as follows:

Description	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
Total adjusted Fuel and Fuel Related Costs	1.8575	1.9237	1.8760	1.8901
EMF Increment (Decrement)	0.1124	0.1396	0.2366	0.1501
Net Fuel and Fuel Related Costs Factors	1.9699	2.0633	2.1126	2.0402

Q. WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE REVISED PROPOSED FUEL AND FUEL-RELATED COSTS FACTORS ARE APPROVED BY THE COMMISSION?

A. The revised proposed fuel and fuel-related costs factors will result in a 1.68% increase on customers' bills, as compared to the previously filed increase of 1.05%.

Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL TESTIMONY?

A. Yes, it does.

DUKE ENERGY CAROLINAS **REVISED McGee Exhibit 1**

North Carolina Annual Fuel and Fuel Related Expense
Summary Comparison of Fuel and Fuel Related Cost Factors
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Description	Reference	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
	Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1163)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.7003	1.8314	1.8020	1.7769
2	EMF Increment	Input	0.0980	0.1068	0.2213	0.1290
3	EMF Interest Decrement cents/kWh	Input	0.0000	0.0000	0.0000	0.0000
4	Approved Net Fuel and Fuel Related Costs Factors	Sum	**1.7983**	**1.9382**	**2.0233**	**1.9059**
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	**1.9841**	**2.0766**	**2.1267**	**2.0548**
6	NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales	Exh 2 Sch 3 pg 2	**2.0167**	**2.0973**	**2.1369**	**2.0768**
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 92.95%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.8092	1.8986	1.8552	1.8574
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0483	0.0251	0.0208	0.0327
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.8575	1.9237	1.8760	1.8901
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
11	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0000	0.0000	0.0000	0.0000
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	**1.9699**	**2.0633**	**2.1126**	**2.0402**

Note: Fuel factors exclude regulatory fee

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2
Schedule 1

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost ($)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Workpaper 3 & 4	18,355,203	3.1057	570,050,837
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9			24,959,649
5	Total Fossil	Sum	39,176,820		1,098,194,572
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		-
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	98,785,509		1,455,692,040
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
13	Net Generation	Sum Lines 10-12	83,018,229		1,346,517,369
14	Purchased Power	Workpaper 3 & 4	9,280,339	3.1771	294,841,746
15	JDA Savings Shared	Workpaper 5			19,972,407
16	Total Purchased Power		9,280,339		314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568	1.8000	1,661,331,522
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)	2.4698	(16,986,301)
19	Line losses and Company use	Line 21-Line 17-Line 18	(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,644,345,221
21	Projected System MWh Sales for Fuel Factor	Workpaper 7	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.8848

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7	21,397,068	23,381,644	12,939,285	57,717,997
	Calculation of Renewable and Cogeneration Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 10,325,952	$ 5,864,785	$ 2,693,265	$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.8092	1.8986	1.8552	1.8574
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8575	1.9237	1.8760	1.8901
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	1.9699	2.0633	2.1126	2.0402

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Workpaper 7	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	21,397,068	$ 2,183,285,633	$ 36,718,999	1.68%	0.1716	1.7983	1.9699
2	General Service/Lighting	23,381,644	1,738,716,194	29,242,128	1.68%	0.1251	1.9382	2.0633
3	Industrial	12,939,285	687,001,167	11,554,143	1.68%	0.0893	2.0233	2.1126
4	NC Retail	57,717,997	$ 4,609,002,994	$ 77,515,270	1.68%			

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7	$ 1,648,542,239
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2	28,169,738
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,620,372,501
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7	87,243,844
9	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
10	Allocation %	Line 9 / Line 8	66.16%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,072,038,447
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	18,884,001
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,090,922,448
14	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.8901
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1501
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	2.0402

Total Current Composite Fuel Rate - Docket E-7 Sub 1163:

19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1	1.7769
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1	0.1290
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.9059
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	0.1343
24	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ 77,515,270

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS — **REVISED McGee Exhibit 2**
North Carolina Annual Fuel and Fuel Related Expense — **Schedule 2**
Calculation of Fuel and Fuel Related Cost Factors Using: — **Page 1 of 3**
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost ($)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Calculated	19,611,529	3.1057	609,068,093
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9	-		24,959,649
5	Total Fossil	Sum	40,433,146		1,137,211,828
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation		184,444		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,041,835		1,494,709,296
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
13	Net Generation	Sum	84,274,555		1,385,534,625
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5	-		19,972,407
16	Total Purchased Power	Sum	9,280,339		314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	93,554,894		1,700,348,778
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,683,362,477
21	Normalized Test Period MWh Sales	Exhibit 4	88,500,170		88,500,170
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9021

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	22,043,791	23,564,462	12,465,801	58,074,054
	Calculation of Renewable Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 10,325,952	$ 5,864,785	$ 2,693,265	$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0468	0.0249	0.0216	0.0325
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.8249	1.9121	1.8685	1.8722
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0468	0.0249	0.0216	0.0325
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8717	1.9370	1.8901	1.9047
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 2 Page 3	1.9841	2.0766	2.1267	2.0548

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Rate Class	Normalized Test Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Exhibit 4	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,043,791	$ 2,183,285,633	$ 40,961,930	1.88%	0.1858	1.7983	1.9841
2	General Service/Lighting	23,564,462	$ 1,738,716,194	32,621,096	1.88%	0.1384	1.9382	2.0766
3	Industrial	12,465,801	$ 687,001,167	12,889,240	1.88%	0.1034	2.0233	2.1267
4	NC Retail	58,074,054	$ 4,609,002,994	$ 86,472,266				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7a	$ 1,687,559,495
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2	28,169,738
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,659,389,757
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a	88,629,309
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4	58,074,054
10	Allocation %	Line 9 / Line 8	65.52%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,087,232,168
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2	18,884,001
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,106,116,170
14	NC Retail Normalized Test Period MWh Sales	Line 4	58,074,054
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.9047
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1501
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	2.0548

Total Current Composite Fuel Rate - Docket E-7 Sub 1163:

19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1	1.7769
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1	0.1290
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.9059
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	0.1489
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4	58,074,054
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ 86,472,266

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost ($)
			D	E	D * E = F
1	Total Nuclear	Workpaper 2	56,739,499	0.6115	346,981,926
2	Coal	Calculated	19,636,789	3.1057	609,852,590
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9	-		24,959,649
5	Total Fossil	Sum	40,458,406		1,137,996,325
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	98,347,563		1,484,978,251
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Calculated	(14,450,934)		(88,383,179)
13	Net Generation	Sum	83,018,229		1,378,482,097
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5	-		19,972,407
16	Total Purchased Power	Sum	9,280,339		314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568		1,693,296,250
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,676,309,949
21	Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9214

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7b	21,397,068	23,381,644	12,939,285	57,717,997
	Calculation of Renewable Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				$ 14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	$ 10,325,952	$ 5,864,785	$ 2,693,265	$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.8560	1.9326	1.8795	1.8940
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.9043	1.9577	1.9003	1.9267
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 3 Page 3	2.0167	2.0973	2.1369	2.0768

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	C / B = D	E	F	G
		Workpaper 7b	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	21,397,068	$ 2,183,285,633	$ 46,725,815	2.14%	0.2184	1.7983	2.0167
2	General Service/Lighting	23,381,644	$ 1,738,716,194	$ 37,211,315	2.14%	0.1591	1.9382	2.0973
3	Industrial	12,939,285	$ 687,001,167	$ 14,702,927	2.14%	0.1136	2.0233	2.1369
4	NC Retail	57,717,997	$ 4,609,002,994	$ 98,640,057				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7b	$ 1,680,506,966
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2	28,169,738
7	System Other Fuel Costs	Line 5 - Line 6	$ 1,652,337,228
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,243,844
9	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
10	Allocation %	Line 9 / Line 8	66.16%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	$ 1,093,186,310
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2	18,884,001
13	NC Retail Total Fuel Costs	Line 11 + Line 12	$ 1,112,070,311
14	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.9267
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1501
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	2.0768

Total Current Composite Fuel Rate - Docket E-7 Sub 1163:

19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1	1.7769
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1	0.1290
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.9059
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	0.1709
24	NC Retail Projected Billing Period MWh Sales	Line 4	57,717,997
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ 98,640,057

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Proposed Composite
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line No.	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (d)
1	January 2018			5,733,820	$	70,210,460
2	February			5,031,181	$	(21,289,748)
3	March(1)			4,190,094	$	4,767,793
4	April(1)			4,416,566	$	(13,736,437)
5	May			4,252,750	$	6,136,829
6	June(1)			5,245,689	$	6,622,242
7	July(1)			5,639,361	$	14,497,484
8	August			5,409,821	$	13,507,110
9	September			6,212,764	$	(8,995,949)
10	October			4,141,212	$	11,156,943
11	November			4,314,713	$	11,789,339
12	December			4,892,732	$	16,666,116
13	**Total Test Period**			**59,480,703**	**$**	**111,332,182**
14	January 2019			5,021,050	$	8,560,193
15	February 2019			5,026,972	$	19,998,561
16	March 2019			4,366,364	$	925,006
17	Adjustment to remove (Over) / Under Recovery - January - March 2018 [2]				$	53,688,503
18	Include Under Recovery related to Coal Inventory Rider				$	37,667
19	**Adjusted (Over)/ Under Recovery**				**$**	**87,165,106**
20	NC Retail Normalized Test Period MWh Sales		Exhibit 4			58,074,054
21	Experience Modification Increment (Decrement) cents/kWh					0.1501

[1] Prior period corrections not included in rate incurred but are included in over/(under) recovery total
[2] January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 16.
Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Residential
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWH Sales (c)	Reported (Over)/ Under Recovery (d)
1	January 2018	2.2454	1.7919	2,747,953	$ 12,463,615
2	February	1.2214	1.7919	2,101,525	$ (11,989,284)
3	March[(1)]	1.8936	1.7919	1,546,024	$ 1,587,096
4	April[(1)]	1.5682	1.7919	1,557,073	$ (3,469,659)
5	May	2.2261	1.7919	1,361,386	$ 5,910,833
6	June[(1)]	1.9042	1.7919	1,940,879	$ 2,162,126
7	July[(1)]	1.9028	1.7919	2,227,922	$ 2,375,059
8	August	1.9776	1.7885	2,050,040	$ 3,875,805
9	September	1.7474	1.7894	2,200,376	$ (925,298)
10	October	2.0726	1.7983	1,554,551	$ 4,264,193
11	November	2.3435	1.7983	1,436,836	$ 7,833,590
12	December	1.9167	1.7983	2,038,462	$ 2,413,589
13	**Total Test Period**			**22,763,029**	**$ 26,501,665**
14	Test Period Wtd Avg. ¢/kWh	1.9096	1.7928		
15	January 2019	1.6843	1.7983	2,194,231	$ (2,476,946)
16	February 2019	1.9667	1.7983	2,094,914	$ 3,527,711
17	March 2019	1.7655	1.8042	1,704,915	$ (724,377)
18	Adjustment to remove (Over) / Under Recovery - January - March 2018 [(2)]				$ 2,061,427
19	Include Under Recovery related to Coal Inventory Rider				$ 14,415
20	**Adjusted (Over)/Under Recovery**				**$ 24,781,042**
21	NC Retail Normalized Test Period MWh Sales			Exhibit 4	22,043,791
22	Experience Modification Increment (Decrement) cents/kWh				0.1124

Notes:
[(1)] Prior period corrections not included in rate incurred but are included in over/(under) recovery total
[(2)] January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - GS/Lighting
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (d)
1	January 2018	3.5376	1.9253	2,053,224	$	33,104,497
2	February	1.5865	1.9253	1,899,154	$	(6,434,005)
3	March[(1)]	2.0122	1.9253	1,709,988	$	1,503,768
4	April[(1)]	1.5762	1.9253	1,819,014	$	(6,335,002)
5	May	1.9140	1.9253	1,860,965	$	(210,465)
6	June[(1)]	1.9786	1.9253	2,190,371	$	1,145,088
7	July[(1)]	2.1543	1.9253	2,291,796	$	5,295,453
8	August	2.1026	1.9219	2,244,902	$	4,054,944
9	September	1.6846	1.9256	2,660,685	$	(6,412,545)
10	October	2.1707	1.9382	1,727,851	$	4,018,244
11	November	2.1580	1.9382	1,824,017	$	4,009,350
12	December	2.4310	1.9382	1,880,041	$	9,264,795
13	**Total Test Period**			**24,162,007**	**$**	**43,004,122**
14	Test Period Wtd Avg. ¢/kWh	2.1057	1.9279			
15	January 2019	2.2307	1.9382	1,936,499	$	5,693,461
16	February 2019	2.5196	1.9382	1,911,117	$	11,110,540
17	March 2019	2.0159	1.9441	1,744,567	$	1,246,918
18	Adjustment remove (Over) / Under Recovery - January - March 2018 [(2)]				$	28,174,260
19	Include Under Recovery related to Coal Inventory Rider				$	15,301
20	**Adjusted (Over)/ Under Recovery**				**$**	**32,896,080**
21	NC Retail Normalized Test Period MWh Sales			Exhibit 4		23,564,462
22	Experience Modification Increment (Decrement) cents/kWh					0.1396

Notes:
[(1)] Prior period corrections not included in rate incurred but are included in over/(under) recovery total
[(2)] January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Industrial
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (d)
1	January 2018	4.6719	2.0297	932,643	$	24,642,348
2	February	1.7515	2.0297	1,030,502	$	(2,866,460)
3	March[(1)]	2.2081	2.0297	934,082	$	1,676,929
4	April[(1)]	1.6509	2.0297	1,040,479	$	(3,931,775)
5	May	2.0721	2.0297	1,030,399	$	436,461
6	June[(1)]	2.3283	2.0297	1,114,438	$	3,315,028
7	July[(1)]	2.6319	2.0297	1,119,643	$	6,826,972
8	August	2.5265	2.0263	1,114,879	$	5,576,360
9	September	1.8991	2.0218	1,351,703	$	(1,658,106)
10	October	2.3580	2.0233	858,810	$	2,874,506
11	November	2.0182	2.0233	1,053,860	$	(53,600)
12	December	2.5353	2.0233	974,229	$	4,987,733
13	**Total Test Period**			**12,555,667**	**$**	**41,826,395**
14	Test Period Wtd Avg. ¢/kWh	2.3595	2.0271			
15	January 2019	2.6216	2.0233	890,321	$	5,343,678
16	February 2019	2.5483	2.0233	1,020,942	$	5,360,311
17	March 2019	2.0724	2.0292	916,881	$	402,464
18	Adjustment to remove (Over) / Under Recovery - January - March 2018 [(2)]				$	23,452,816
19	Include Under Recovery related to Coal Inventory Rider				$	7,951
20	**Adjusted (Over)/ Under Recovery**				**$**	**29,487,982**
21	NC Retail Normalized Test Period MWh Sales		Exhibit 4			12,465,801
22	Experience Modification Increment (Decrement) cents/KWh					0.2366

Notes:
[(1)] Prior period corrections not included in rate incurred but are included in over/(under) recovery total
[(2)] January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
Rounding differences may occur

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Sales, Fuel Revenue, Fuel Expense and System Peak
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 4

Line #	Description	Reference	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWh Sales (excluding inter system sales)	Exhibit 6 Schedule 1 (Line 4) and Workpaper 11 (NC retail)	90,487,628	59,480,703	22,763,029	24,162,007	12,555,667
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1	419,697	242,974	188,587	39,238	15,149
3	Weather MWh Adjustment	Workpaper 12	(2,407,155)	(1,649,623)	(907,825)	(636,783)	(105,015)
4	Total Normalized MWh Sales	Sum	88,500,170	58,074,054	22,043,791	23,564,462	12,465,801
5	Test Period Fuel and Fuel Related Revenue *		$ 1,691,073,964	$ 1,128,424,268			
6	Test Period Fuel and Fuel Related Expense *		$ 1,852,283,575	$ 1,239,756,450			
7	Test Period Unadjusted (Over)/Under Recovery		$ 161,209,611	$ 111,332,182			

		Winter Coincidental Peak (CP) kW
8	Total System Peak	18,875,799
9	NC Retail Peak	12,650,981
10	NC Residential Peak	6,917,677
11	NC General Service/Lighting Peak	3,929,002
12	NC Industrial Peak	1,804,302

* Total Company Fuel and Fuel Related Revenue and Fuel and Fuel Related Expense are determined based upon the fuel and fuel related cost recovery mechanisms in each of the company's jurisdictions.

DUKE ENERGY CAROLINAS **McGee Exhibit 5**
North Carolina Annual Fuel and Fuel Related Expense
Nuclear Capacity Ratings
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Unit	Rate Case Docket E-7, Sub 1146	Fuel Docket E-7, Sub 1163	Proposed Capacity Rating MW
Oconee Unit 1	847	847.0	847.0
Oconee Unit 2	848	848.0	848.0
Oconee Unit 3	859	859.0	859.0
McGuire Unit 1	1,158	1158.0	1158.0
McGuire Unit 2	1,158	1157.6	1157.6
Catawba Unit 1	1,160	1160.1	1160.1
Catawba Unit 2	1,150	1150.1	1150.1
Total Company	7,180	7,179.8	7,179.8

Revised McGee Exhibit 6

DECEMBER 2018 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1161

Line No.		December 2018	12 Months Ended December 2018
1	Fuel and fuel-related costs	$ 167,457,560	$ 1,885,269,344
	MWH sales:		
2	Total system sales	7,718,637	92,433,072
3	Less intersystem sales	228,210	1,945,444
4	Total sales less intersystem sales	7,490,427	90,487,628
5	Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	2.2356	2.0835
6	Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 2a Total)	1.8969	
	Generation Mix (MWH):		
	Fossil (by primary fuel type):		
7	Coal	1,366,724	22,653,740
8	Fuel Oil	12,042	232,515
9	Natural Gas - Combined Cycle	1,059,332	13,695,555
10	Natural Gas - Combustion Turbine	42,178	2,550,671
11	Natural Gas - Steam	127,536	187,574
12	Biogas	3,259	30,204
13	Total fossil	2,611,071	39,350,259
14	Nuclear 100%	4,981,169	59,936,028
15	Hydro - Conventional	368,610	2,877,050
16	Hydro - Pumped storage	(44,946)	(529,226)
17	Total hydro	323,664	2,347,824
18	Solar Distributed Generation	5,768	130,018
19	Total MWH generation	7,921,672	101,764,129
20	Less joint owners' portion - Nuclear	1,147,290	15,165,371
21	Less joint owners' portion - Combined Cycle	27,377	465,202
22	Adjusted total MWH generation	6,747,005	86,133,556

Note: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1161

Fuel and fuel-related costs:	December 2018	12 Months Ended December 2018
0501110 coal consumed - steam	$ 46,847,568	$ 675,888,074
0501222-0501223 biomass/test fuel consumed	-	
0501310 fuel oil consumed - steam	1,223,578	8,586,389
0501330 fuel oil light-off - steam	593,669	7,287,851
Total Steam Generation - Account 501	48,664,815	691,762,314
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	23,069,842	275,311,826
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	2,272,971	98,161,049
0547100 natural gas consumed - Steam	5,696,114	8,633,545
0547101 natural gas consumed - Combined Cycle	31,773,516	373,047,230
0547106 biogas consumed - Combined Cycle	175,961	1,523,560
0547200 fuel oil consumed - Combustion Turbine	57,020	25,830,495
Total Other Generation - Account 547	39,975,582	507,195,879
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,549,134	27,110,200
Total Reagents	1,549,134	27,110,200
By-products		
Net proceeds from sale of by-products	583,525	6,085,203
Total By-products	583,525	6,085,203
Total Fossil and Nuclear Fuel Expenses Included in Base Fuel Component	113,842,898	1,507,465,422
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	211,474	10,514,290
Capacity component of purchased power (renewables)	594,915	13,300,661
Capacity component of purchased power (PURPA)	159,399	6,541,261
Fuel and fuel-related component of purchased power	59,686,689	434,709,945
Total Purchased Power and Net Interchange - Account 555	60,652,477	465,066,157
Less:		
Fuel and fuel-related costs recovered through intersystem sales	6,944,585	86,336,253
Fuel in loss compensation	92,474	925,224
Solar integration charge revenue	758	758
Total Fuel Credits - Accounts 447 /456	7,037,817	87,262,235
Total Fuel and Fuel-related Costs	$ 167,457,560	$ 1,885,269,344

Notes: Detail amounts may not add to totals shown due to rounding.
Report reflects net ownership costs of jointly owned facilities.

DUKE ENERGY CAROLINAS
PURCHASED POWER AND INTERCHANGE
SYSTEM REPORT - NORTH CAROLINA VIEW

December 2018

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Cherokee County Cogeneration Partners	$ 1,287,426	$ 211,474	27,369	$ 946,407	$ 129,545	
City of Kings Mountain	8,979	8,979	-	-	-	
DE Progress - Native Load Transfer	27,945,591	-	741,793	23,410,601	4,543,696	$ (8,706)
DE Progress - Native Load Transfer Benefit	1,156,134	-	-	1,156,134	-	
DE Progress - Fees	(156,964)	-	-	-	(156,964)	
Haywood Electric - Economic	40,903	20,630	336	12,367	7,906	
Macquarie Energy, LLC	6,826,931	-	146,439	4,164,428	2,662,503	
NCEMC - Economic	115,200	-	3,600	70,272	44,928	
NCMPA Instantaneous - Economic	1,813,810	-	53,310	1,088,467	725,343	
NTE Carolinas LLC	3,232,610	-	78,830	1,971,892	1,260,718	
Piedmont Municipal Power Agency	307,201	-	10,960	184,355	122,846	
PJM Interconnection, LLC.	11,214,935	-	313,334	6,841,110	4,373,825	
Southern Company Services, Inc.	250,370	-	9,167	152,726	97,644	
Tennesse Valley Authority	96,400	-	2,600	58,804	37,596	
Town of Dallas	584	584	-	-	-	
Town of Forest City	19,856	19,856	-	-	-	
	$ 54,159,966	**$ 261,523**	**1,387,738**	**$ 40,057,563**	**$ 13,849,586**	**$ (8,706)**
Renewable Energy						
REPS	$ 4,406,020	$ 594,902	77,027	$ -	$ 3,811,118	$ -
DERP - Purchased Power	149	13	3	-	136	
	$ 4,406,169	**$ 594,915**	**77,030**	**$ -**	**$ 3,811,254**	**$ -**
HB589 PURPA Purchases						
Qualifying Facilities	1,936,441	159,399	37,040		1,712,356	64,686
	$ 1,936,441	**$ 159,399**	**37,040**	**$ -**	**$ 1,712,356**	**$ 64,686**
Non-dispatchable						
Blue Ridge Electric Membership Corp.	$ 1,244,696	$ 724,668	26,268	$ 317,217		$ 202,811
Haywood Electric	351,238	152,148	7,201	121,445		77,645
Macquarie Energy, LLC	957,341	-	12,433	583,978		373,363
NCEMC - Other	4,398	4,398	-	-		-
NCMPA	155,400	-	1,110	94,794		60,606
Piedmont Electric Membership Corp.	592,764	346,426	11,904	150,266		96,072
Generation Imbalance	1,078,303	-	8,735	242,385		835,918
Energy Imbalance - Purchases	(277,960)	-	(11,956)	(169,556)		(108,404)
Energy Imbalance - Sales	(269,174)	-	-	(269,534)		360
Other Purchases	648	-	19	-		648
	$ 3,837,654	**$ 1,227,640**	**55,714**	**$ 1,070,995**	**$ -**	**$ 1,539,019**
Total Purchased Power	**$ 64,340,230**	**$ 2,243,477**	**1,557,522**	**$ 41,128,558**	**$ 19,373,196**	**$ 1,594,999**
Interchanges In						
Other Catawba Joint Owners	6,629,878	-	579,425	3,870,366		2,759,512
WS Lee Joint Owner	1,406,837		43,619	1,229,697		177,140
Total Interchanges In	8,036,714	-	623,044	5,100,063	-	2,936,651
						(1)
Interchanges Out						
Other Catawba Joint Owners	(7,985,890)	(134,209)	(695,363)	(4,647,804)		(3,203,877)
Catawba- Net Negative Generation	(66,943)	-	(2,964)	(51,150)		(15,793)
WS Lee Joint Owner	(1,402,174)		(42,514)	(1,216,174)		(186,000)
Total Interchanges Out	(9,455,007)	(134,209)	(740,841)	(5,915,128)	-	(3,405,670)
Net Purchases and Interchange Power	**$ 62,921,937**	**$ 2,109,268**	**1,439,725**	**$ 40,313,493**	**$ 19,373,196**	**$ 1,125,979**

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
SYSTEM REPORT - NORTH CAROLINA VIEW

DECEMBER 2018

Sales	Total $	Capacity $	Non-capacity mWh	Non-capacity Fuel $	Non-capacity Non-fuel $
Utilities:					
SC Public Service Authority - Emergency	$ 19,312	-	475	$ 16,530	$ 2,782
SC Electric & Gas - Emergency	22,373	-	383	21,699	674
Market Based:					
NCMPA	110,344	$ 87,568	392	22,919	(143)
PJM Interconnection, LLC.	69	-	-	-	69
SC Electric & Gas	2,050	-	-	-	2,050
Other:					
DE Progress - Native Load Transfer Benefit	287,133	-	-	287,133	-
DE Progress - Native Load Transfer	8,259,541	-	225,840	6,529,920	1,729,621
Generation Imbalance	76,917	-	1,120	66,384	10,533
BPM Transmission	(67,517)	-			(67,517)
Total Intersystem Sales	**$ 8,710,222**	**$ 87,568**	**228,210**	**$ 6,944,585**	**$ 1,678,069**

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
PURCHASED POWER AND INTERCHANGE
SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended December 2018

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Cherokee County Cogeneration Partners	$ 31,713,488	$ 10,514,290	536,248	$ 18,602,696	$ 2,596,502	
City of Kings Mountain	107,748	107,748	-	-	-	
DE Progress - Native Load Transfer	194,410,960	-	5,426,920	174,475,494	19,671,245	$ 264,221
DE Progress - Native Load Transfer Benefit	13,751,828	-	-	13,751,828	-	
DE Progress - Fees	(1,093,167)	-	-	-	(1,093,167)	
EDF Trading North America, LLC.	76,115	-	3,005	46,430	29,685	
Exelon Generation Company, LLC.	118,087	-	4,060	72,034	46,053	
Haywood Electric - Economic	487,779	251,870	5,097	143,904	92,005	
Macquarie Energy, LLC	29,508,026	-	770,088	17,999,896	11,508,130	
Morgan Stanley Capital Group	24,839	-	1,112	15,152	9,687	
NCEMC	169,200	-	5,490	103,212	65,988	
NCMPA	4,490,834	-	71,519	3,053,238	1,437,596	
NCMPA Load Following Economic	16,007,553	-	506,485	10,121,981	5,885,572	
NTE Carolinas LLC	7,004,810	-	195,650	4,272,935	2,731,875	
Piedmont Municipal Power Agency	2,609,446	-	88,744	1,680,985	928,461	
PJM Interconnection, LLC.	51,171,173	-	864,902	31,214,417	19,956,756	
Rainbow Energy Marketing Corporation	87,525	-	3,285	53,390	34,135	
South Carolina Electric & Gas Company	212,527	-	4,600	127,811	84,716	
Southern Company Services, Inc.	1,289,556	-	45,702	786,630	502,926	
Tennesse Valley Authority	1,603,241	-	30,841	977,977	625,264	
The Energy Authority	38,483	-	1,167	23,475	15,008	
Town of Dallas	7,008	7,008	-	-	-	
Town of Forest City	238,272	238,272	-	-	-	
	$ 354,035,331	**$ 11,119,188**	**8,564,915**	**$ 277,523,485**	**$ 65,128,437**	**$ 264,221**
Renewable Energy						
REPS	$ 63,156,850	$ 13,329,597	974,338	$ -	$ 49,827,253	$ -
DERP - Purchased Power	2,713	565	49	-	2,148	
DERP - Net Metered Generation	43,550	7,964	15	-		35,586
	$ 63,203,112	**$ 13,338,125**	**974,403**	**$ -**	**$ 49,829,401**	**$ 35,586**
HB589 PURPA Purchases						
Qualifying Facilities	$ 33,029,557	$ 6,511,759	550,930		$ 25,435,460	$ 1,082,338
	$ 33,029,557	**$ 6,511,759**	**550,930**	**$ -**	**$ 25,435,460**	**$ 1,082,338**
Non-dispatchable						
Blue Ridge Electric Membership Corp.	$ 14,972,210	$ 8,136,773	295,129	$ 4,169,615		$ 2,665,822
Haywood Electric	4,206,307	1,935,370	80,216	1,385,271		885,666
Macquarie Energy, LLC	18,266,985	-	307,544	11,142,861		7,124,124
NCEMC - Other	647,276	52,776	6,570	362,645		231,855
NCMPA - Reliability	245,400	-	2,610	149,694		95,706
NTE Carolinas LLC	1,828,310	-	36,865	1,115,269		713,041
Piedmont Electric Membership Corp.	7,179,987	3,902,138	140,568	1,999,488		1,278,361
South Carolina Electric & Gas Company	131,734	-	1,400	80,358		51,376
Southern Company Services, Inc.	2,984,720	-	47,510	1,820,679		1,164,041
Generation Imbalance	3,782,664		82,265	1,893,961		1,888,703
Energy Imbalance - Purchases	2,199,376		25,123	1,350,748		848,628
Energy Imbalance - Sales	(1,765,005)		-	(6,529,253)		4,764,248
Other Purchases	12,518	-	352	-		12,518
	$ 54,692,482	**$ 14,027,057**	**1,026,152**	**$ 18,941,336**	**$ -**	**$ 21,724,089**
Total Purchased Power	**$ 504,960,482**	**$ 44,996,129**	**11,116,400**	**$ 296,464,821**	**$ 140,393,298**	**$ 23,106,234**
						-
Interchanges In						
Other Catawba Joint Owners	91,135,514	-	7,642,809	56,961,998		34,173,516
WS Lee Joint Owner	7,725,713	-	271,306	6,611,033		1,114,680
Total Interchanges In	98,861,227	-	7,914,116	63,573,032	-	35,288,195
Interchanges Out						
Other Catawba Joint Owners	(93,139,372)	(1,580,207)	(7,784,646)	(57,610,256)		(33,948,909)
Catawba- Net Negative Generation	(231,152)	-	(11,304)	(180,241)		(50,911)
WS Lee Joint Owner	(9,390,983)	-	(327,441)	(7,930,708)		(1,460,275)
Total Interchanges Out	(102,761,507)	(1,580,207)	(8,123,391)	(65,721,205)	-	(35,460,095)
Net Purchases and Interchange Power	**$ 501,060,202**	**$ 43,415,922**	**10,907,125**	**$ 294,316,648**	**$ 140,393,298**	**$ 22,934,334**

NOTES: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended
DECEMBER 2018

Sales	Total $		Capacity $		Non-capacity mWh	Non-capacity Fuel $	Non-capacity Non-fuel $
Utilities:							
DE Progress - Emergency	$ 15,390		-		333	$ 13,113	$ 2,277
SC Public Service Authority - Emergency	2,315,135		$ 224,000		7,527	2,007,790	83,345
SC Electric & Gas - Emergency	103,368	**A**	-	**A**	1,974	87,826	15,542
Market Based:							
Central Electric Power Cooperative, Inc.	2,793,800	**B**	2,793,800	**B**	-	-	-
EDF Trading Company	2,600		-		50	1,976	624
Macquarie Energy, LLC	19,200		-		-	-	19,200
NCMPA	1,454,481		1,050,069		5,529	368,868	35,544
PJM Interconnection, LLC.	1,502,443		-		24,365	918,000	584,443
SC Electric & Gas	317,950	**A**	-	**A**	4,050	268,115	49,835
Tennessee Valley Authority	49,525		-		1,025	37,501	12,024
The Energy Authority	55,545		-		604	33,101	22,444
Other:							
DE Progress - Native Load Transfer Benefit	5,666,748		-		-	5,666,748	-
DE Progress - Native Load Transfer	78,027,793		-		1,883,308	74,808,327	3,219,466
Generation Imbalance	1,760,829		-		16,679	2,124,888	(364,059)
BPM Transmission	(245,056)		-			-	(245,056)
Total Intersystem Sales	**$ 93,839,751**		**$ 4,067,869**		**1,945,444**	**$ 86,336,253**	**$ 3,435,629**

* Sales for resale other than native load priority.

NOTES: Detail amounts may not add to totals shown due to rounding.

A - Twelve months ended December 2018 includes a correction to reclassify market sales for the month of October 2018 as an emergency sale. The October 2018 sales were as follows: Total dollars = $24,456, Non capacity MWH = 408, Non-capacity fuel dollars = $20,096, and Non-capacity non-fuel dollars = $3,550.

B - Twelve months ended December 2018 includes a correction to include market capacity sales for the period January 2018 - October 2018. Market capacity sales each month were as follows: Total dollars = $279,380, and capacity dollars= $279,380. Total market capacity sales dollars for the period January 2018 - October 2018 = $2,793,800.

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
December 2018

Line No.			Residential	Commercial	Industrial	Total
1	Actual System kWh sales	Input				7,490,426,895
2	DERP Net Metered kWh generation	Input				10,412,429
3	Adjusted System kWh sales	L1 + L2				7,500,839,324
4	N.C. Retail kWh sales	Input	2,038,461,729	1,880,040,961	974,229,470	4,892,732,160
5	NC kWh sales % of actual system kWh sales	L4 T / L1				65.32%
6	NC kWh sales % of adjusted system kWh sales	L4 T / L3				65.23%
7	Approved fuel and fuel-related rates (¢/kWh)					
	7a Billed rates by class (¢/kWh)	Input Annually	1.7983	1.9382	2.0233	1.8969
	7b Billed fuel expense	L7a * L4 / 100	$36,657,657	$36,438,954	$19,711,585	$92,808,196
8	Incurred base fuel and fuel-related (less renewable purchased power capacity) rates by class (¢/kWh)					
	8a Docket E-7, Sub 1163 allocation factor	Input	35.64%	41.77%	22.59%	
	8b System incurred expense	Input				$166,830,104
	8c Incurred base fuel and fuel-related expense	L8b * L6 * 8a	$38,786,219	$45,458,159	$24,577,446	$108,821,824
	8d Incurred base fuel rates by class (¢/kWh)	L8c / L4 * 100	1.9027	2.4179	2.5228	2.2242
9	Incurred renewable purchased power capacity rates by class (¢/kWh)					
	9a NC retail production plant %	Input				67.56%
	9b Production plant allocation factors	Input	43.68%	37.64%	18.68%	100.00%
	9c System incurred expense	Input				$965,788
	9d Incurred renewable capacity expense	L9a * L9b * 9c	$285,027	$245,590	$121,872	$652,488
	9e Incurred renewable capacity rates by class (¢/kWh)	(L9a * L9c) * L9b / L4 * 100	0.0140	0.0131	0.0125	0.0133
10	Total incurred rates by class (¢/kWh)	L8d + L9e	1.9167	2.4310	2.5353	2.2375
11	Difference in ¢/kWh (incurred - billed)	L7c - L10	0.1184	0.4928	0.5120	0.3406
12	(Over) / under recovery [See footnote]	(L4 * L11) / 100	$2,413,589	$9,264,795	$4,987,733	$16,666,116
13	Prior period adjustments	Input				
14	Total (over) / under recovery [See footnote]	L12+ L13	$2,413,589	$9,264,795	$4,987,733	$16,666,116
15	Total system incurred expense	L8b + L9c				$167,795,892
16	Less: Jurisdictional allocation adjustment(s)	Input				338,332
17	Total Fuel and Fuel-related Costs per Schedule 2	L15 + L16				$167,457,560

18 (Over) / under recovery for each month of the current calendar year [See footnote]

		(Over) / Under Recovery				
	Year 2018	Total To Date	Residential	Commercial	Industrial	Total Company
	January	$70,210,459	$12,463,615	$33,104,497	$24,642,348	$70,210,459
	February	48,920,711	($11,989,284)	($6,434,005)	($2,866,460)	(21,289,748)
_/1	March	53,688,504	$1,587,096	$1,503,768	$1,676,929	4,767,793
_/1	April	39,952,067	($3,469,659)	($6,335,002)	($3,931,775)	(13,736,437)
	May	46,088,897	$5,910,833	($210,465)	$436,461	6,136,830
	June	52,711,139	$2,162,126	$1,145,088	$3,315,028	6,622,242
_/2	July	67,208,623	$2,375,059	$5,295,453	$6,826,972	14,497,484
	August	80,715,732	$3,875,805	$4,054,944	$5,576,360	13,507,109
_/2	September	71,719,783	($925,298)	($6,412,545)	($1,658,106)	(8,995,949)
_/2	October	82,876,726	$4,264,193	$4,018,244	$2,874,506	11,156,943
	November	$94,666,066	$7,833,590	$4,009,350	($53,600)	$11,789,340
	December	$111,332,182	$2,413,589	$9,264,795	$4,987,733	$16,666,116
			$26,501,665	$43,004,122	$41,826,396	$111,332,182

Notes:
Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.
Under collections, or regulatory assets, are shown as positive amounts.

_/1 Includes prior period adjustments.
_/2 Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
DECEMBER 2018

Description	Allen Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	Rockingham CT	Current Month	Total 12 ME December 2018
Cost of Fuel Purchased ($)																
Coal	$49,933	$17,907,637			$8,548,228					$22,079,739					$48,585,537	$657,498,215
Oil	143,133	1,082,966	-		273,156	-	-	-	-	-		-		-	1,499,256	48,634,501
Gas - CC			$13,103,055			$12,923,682	$6,858,257								32,884,994	384,692,206
Gas - CT								104,195	$110,569			$158,525		$1,899,682	2,272,971	98,161,049
Gas - Steam					5,695,205			909							5,696,114	8,633,545
Biogas			-			361,043	-								361,043	3,466,205
Total	$193,066	$18,990,604	$13,103,055		$14,516,590	$13,284,725	$6,858,257	$105,103	$110,569	$22,079,739		$158,525		$1,899,682	$91,299,914	$1,201,085,721
Average Cost of Fuel Purchased (¢/MBTU)																
Coal		555.02			687.75	-				399.01					485.71	324.71
Oil	1,321.84	172.99			692.52			-	-	-		-		-	221.68	1,358.88
Gas - CC			442.19			442.08	455.27								442.14	392.80
Gas - CT								532.70	467.48			510.56		457.22	464.11	343.97
Gas - Steam					445.73										-	410.58
Biogas			-		.	1,577.30	-								1,577.30	1,603.31
Weighted Average	1,782.98	492.94	442.19		567.03	450.90	455.27	532.60	467.48	399.01		510.56		457.22	459.65	358.68
Cost of Fuel Burned ($)																
Coal	$741,089	$19,525,109			$12,888,384	-	-	-		$13,692,987					$46,847,568	$675,888,074
Oil - CC			-			-	-								-	-
Oil - Steam/CT	163,523	1,219,227			286,271			25,472	$25,788	148,226		-		-	1,874,266	41,704,735
Gas - CC			$13,103,055			$12,923,682	$6,858,257								32,884,994	384,692,206
Gas - CT								$104,195	110,569			$158,525		$1,899,682	2,272,971	98,161,049
Gas - Steam					5,695,205			909							5,696,114	8,633,545
Biogas			-			361,043	-								361,043	3,466,205
Nuclear				$8,356,486							$10,990,838		$10,470,715		29,818,039	370,839,248
Total	$904,613	$20,744,336	$13,103,055	$8,356,486	$18,869,860	$13,284,725	$6,858,257	$130,575	$136,358	$13,841,212	$10,990,838	$158,525	$10,470,715	$1,899,682	$119,754,995	$1,583,385,062
Average Cost of Fuel Burned (¢/MBTU)																
Coal	359.55	352.99			354.20			-		341.94					350.11	315.40
Oil - CC															-	-
Oil - Steam/CT	1,564.97	1,487.41			1,505.97			12,245.96	1,521.44	1,620.84		-		-	1,530.31	1,604.54
Gas - CC			442.19			442.08	455.27								442.14	392.80
Gas - CT								532.70	467.48			510.56		457.22	464.11	343.97
Gas - Steam					445.73			-							-	410.58
Biogas			-			1,577.30	-								1,577.30	1,603.31
Nuclear				58.63							62.46		58.28		59.86	61.43
Weighted Average	417.71	369.55	442.19	58.63	382.33	450.90	455.27	654.77	537.96	344.86	62.46	510.56	58.28	457.22	165.17	166.78
Average Cost of Generation (¢/kWh)								1,287.30	632.18							
Coal	2.92	3.41			3.52	-	-	-	-	3.41					3.43	2.98
Oil - CC			-			-	-								-	-
Oil - Steam/CT	12.43	15.65			14.52	-	-	128.73	63.22	16.41		-		-	15.56	17.94
Gas - CC			3.06			3.11	3.19								3.10	2.81
Gas - CT								5.57	10.88			8.08		5.09	5.39	3.85
Gas - Steam					4.45				-						4.47	4.60
Biogas			-			11.08	-								11.08	11.48
Nuclear				0.59							0.62		0.59		0.60	0.62
Weighted Average	3.39	3.57	3.06	0.59	3.80	3.17	3.19	9.16	12.90	3.44	0.62	8.08	0.59	5.09	1.51	1.56
Burned MBTU's																
Coal	206,117	5,531,427			3,638,779			-		4,004,460					13,380,783	214,294,473
Oil - CC															-	-
Oil - Steam/CT	10,449	81,970			19,009			208	1,695	9,145		-		-	122,476	2,599,178
Gas - CC			2,963,222			2,923,367	1,506,423								7,393,012	97,936,802
Gas - CT								19,560	23,652			31,049		415,485	489,746	28,537,792
Gas - Steam					1,277,737		174								1,277,911	2,102,783
Biogas			-			22,890	-								22,890	216,190
Nuclear				14,252,377							17,596,869		17,965,994		49,815,240	603,676,564
Total	216,566	5,613,397	2,963,222	14,252,377	4,935,525	2,946,257	1,506,423	19,942	25,347	4,013,605	17,596,869	31,049	17,965,994	415,485	72,502,058	949,363,782

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
DECEMBER 2018

Description	Allen Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	McGuire Nuclear	Mill Creek CT	Oconee Nuclear	Rockingham CT	Current Month	Total 12 ME December 2018
Net Generation (mWh)																
Coal	25,397	573,052			366,421					401,855					1,366,724	22,653,740
Oil - CC															-	-
Oil - Steam/CT	1,315	7,791			1,972	-	-	20	41	903		-		-	12,042	232,515
Gas - CC			428,198			416,157	214,977	-							1,059,332	13,695,555
Gas - CT								1,871	1,016			1,961		37,330	42,178	2,550,671
Gas - Steam					128,002			(466)							127,536	187,574
Biogas			-			3,259	-								3,259	30,204
Nuclear 100%				1,420,722							1,778,199		1,782,248		4,981,169	59,936,028
Hydro (Total System)															323,664	2,347,824
Solar (Total System)															5,768	130,018
Total	26,712	580,843	428,198	1,420,722	496,394	419,416	214,977	1,425	1,057	402,758	1,778,199	1,961	1,782,248	37,330	7,921,672	101,764,129
Cost of Reagents Consumed ($)																
Ammonia		($46,049)	$14,280		$11,119	$8,043	$11,630								($977)	$4,077,078
Limestone	$24,711	467,587			478,632					$374,113					1,345,043	19,594,631
Sorbents	-	53,543								73,539					127,081	2,353,883
Urea	-									45,004					45,004	928,117
Re-emission Chemical		-													-	69,161
Dibasic Acid	-														-	-
Activated Carbon	34,464									-					34,464	170,782
Total	$59,175	$475,081	$14,280		489,751	$8,043	$11,630			$492,656					$1,550,615	$27,193,652

Notes:
Detail amounts may not add to totals shown due to rounding.
Data is reflected at 100% ownership.
Schedule excludes in-transit and terminal activity.
Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.
Re-emission chemical reagent expense is not recoverable in NC.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
DECEMBER 2018

Description	Allen Steam	Belews Creek Steam	Buck CC	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	Rockingham CT	Current Month	Total 12 ME December 2018
Coal Data:													
Beginning balance	196,674	741,379		565,251			-		448,731			1,952,035	2,321,844
Tons received during period	-	221,261		95,812					262,988			580,061	8,353,369
Inventory adjustments	(16,000)	(91,871)		(46,501)			-		(41,785)			(196,158)	(171,512)
Tons burned during period	8,841	221,660		146,683			-		158,816			536,000	8,703,762
Ending balance	171,833	649,109		467,879			-		511,118			1,799,939	1,799,939
MBTUs per ton burned	23.31	24.95		24.81			-		25.21			24.96	24.62
Cost of ending inventory ($/ton)	83.82	88.09		87.87			-		86.22			87.09	87.09
Oil Data:													
Beginning balance	90,694	221,182	-	236,089	-	-	714,747	9,834,797	312,274	4,366,782	3,238,190	19,014,755	16,962,536
Gallons received during period	75,652	578,080	-	144,399	-	-	-	-	-	-	-	798,131	21,144,157
Miscellaneous adjustments	448	(35,415)	-	(11,633)	-	-	(9,425)	-	-	-	-	(57,379)	(352,297)
Gallons burned during period	75,879	596,667		137,943	-	-	1,520	12,305	66,449	-	-	889,408	18,888,297
Ending balance	90,915	167,180	-	230,912	-	-	703,802	9,822,492	245,825	4,366,782	3,238,190	18,866,098	18,866,098
Cost of ending inventory ($/gal)	2.16	1.99	-	2.08	-	-	2.33	2.10	2.23	2.47	2.17	2.20	2.20
Natural Gas Data:													
Beginning balance													
MCF received during period			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,402
MCF burned during period			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,402
Ending balance													
Biogas Data:													
Beginning balance													
MCF received during period			-		22,062	-						22,062	210,727
MCF burned during period			-		22,062	-						22,062	210,727
Ending balance													
Limestone Data:													
Beginning balance	23,869	38,673		34,190					37,083			133,815	169,322
Tons received during period	-	6,707		7,615					12,836			27,159	444,242
Inventory adjustments	(2,996)	(4,910)		-					(7,085)			(14,991)	(14,991)
Tons consumed during period	527	11,600		9,514					9,187			30,828	483,419
Ending balance	20,346	28,870		32,292					33,647			115,155	115,155
Cost of ending inventory ($/ton)	46.89	39.54		39.44					40.72			41.16	41.16

	Qtr Ending December 2018	Total 12 ME December 2018
Ammonia Data:		
Beginning balance	1,315	1,159
Tons received during period	901	4,715
Tons consumed during period	583	4,241
Ending balance	1,633	1,633
Cost of ending inventory ($/ton)	620.44	620.44

Notes:
Detail amounts may not add to totals shown due to rounding.
Schedule excludes in-transit and terminal activity.
Gas is burned as received; therefore, inventory balances are not maintained.

Schedule 6

DUKE ENERGY CAROLINAS

ANALYSIS OF COAL PURCHASED

DECEMBER 2018

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	-	$ -	$ -
	CONTRACT	-	-	-
	ADJUSTMENTS	-	49,933	-
	TOTAL	-	49,933	-
BELEWS CREEK	SPOT	-	11,982	-
	CONTRACT	221,261	17,706,037	80.02
	ADJUSTMENTS	-	189,618	-
	TOTAL	221,261	17,907,637	80.93
CLIFFSIDE	SPOT	-	-	-
	CONTRACT	95,812	7,221,379	75.37
	ADJUSTMENTS	-	1,326,849	-
	TOTAL	95,812	8,548,228	89.22
MARSHALL	SPOT	96,525	8,181,703	84.76
	CONTRACT	166,463	13,355,663	80.23
	ADJUSTMENTS	-	542,373	-
	TOTAL	262,988	22,079,739	83.96
ALL PLANTS	SPOT	96,525	8,193,685	84.89
	CONTRACT	483,536	38,283,079	79.17
	ADJUSTMENTS	-	2,108,773	-
	TOTAL	580,061	$ 48,585,537	$ 83.76

DUKE ENERGY CAROLINAS

ANALYSIS OF COAL QUALITY RECEIVED

DECEMBER 2018

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
BELEWS CREEK	6.91	10.15	12,468	1.58
CLIFFSIDE	8.48	7.60	12,603	2.35
MARSHALL	6.73	10.02	12,508	1.73

DUKE ENERGY CAROLINAS
ANALYSIS OF OIL PURCHASED
DECEMBER 2018

	ALLEN	BELEWS CREEK	CLIFFSIDE
VENDOR	HighTowers	HighTowers	HighTowers
SPOT/CONTRACT	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0
GALLONS RECEIVED	75,652	578,080	144,399
TOTAL DELIVERED COST	$ 143,133	$ 1,082,966	$ 273,156
DELIVERED COST/GALLON	$ 1.89	$ 1.87	$ 1.89
BTU/GALLON	138,000	138,000	138,000

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 - December, 2018
Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Oconee 1	6,745,635	847	90.91	89.94
Oconee 2	7,581,168	848	102.06	100.00
Oconee 3	6,967,442	859	92.59	92.12
McGuire 1	10,359,250	1,158	102.12	99.56
McGuire 2	9,502,818	1,158	93.68	91.80
Catawba 1	9,510,487	1,160	93.59	92.99
Catawba 2	9,269,228	1,150	92.01	91.84

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018
Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,463,456	206	81.10	88.68
Buck CC	12	1,471,968	206	81.57	89.09
Buck CC	ST10	2,237,637	312	81.87	96.78
Buck CC	Block Total	5,173,061	724	81.57	92.29
Dan River CC	8	1,433,925	199	82.26	86.38
Dan River CC	9	1,410,200	199	80.90	85.84
Dan River CC	ST7	2,118,133	320	75.56	91.38
Dan River CC	Block Total	4,962,258	718	78.90	88.46
WS Lee CC	11	1,030,538	223	70.01	75.09
WS Lee CC	12	1,090,492	223	74.08	77.05
WS Lee CC	ST10	1,402,639	337	63.05	76.36
WS Lee CC	Block Total	3,523,669	783	68.17	76.19

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	4,793,474	1,110	49.30	88.06
Belews Creek 2	3,227,943	1,110	33.20	69.66
Marshall 3	3,176,205	658	55.10	89.31
Marshall 4	3,675,692	660	63.58	88.48

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	4,311,369	844	58.31	75.32
Marshall 1	958,416	380	28.79	88.74
Marshall 2	675,957	380	20.31	68.31

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018
Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	71,408	167	4.88	83.17
Allen	2	86,505	167	5.91	84.03
Allen	3	158,113	270	6.68	80.91
Allen	4	178,336	267	7.62	89.89
Allen	5	325,399	259	14.34	85.49
Cliffside	5	1,243,104	546	25.99	61.63
Lee	3	54,152	173	3.57	36.34

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018
Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Lee CT	79,514	96	84.70
Lincoln CT	82,484	1,565	93.72
Mill Creek CT	201,194	735	99.23
Rockingham CT	2,325,235	895	90.19

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2018 through December, 2018
Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Conventional Hydroelectric Stations:			
Bear Creek	37,232	9.5	86.90
Bridgewater	117,680	31.5	95.52
Bryson	4,632	0.9	85.69
Cedar Cliff	27,610	6.8	92.39
Cedar Creek	178,151	45.0	81.91
Cowans Ford	312,212	324.0	58.69
Dearborn	222,145	42.0	97.55
Fishing Creek	203,570	50.0	88.41
Franklin	3,726	1.0	58.90
Gaston Shoals	14,686	4.5	96.65
Great Falls	-92	12.0	100.00
Keowee	98,064	152.0	99.21
Lookout Shoals	162,927	27.0	99.26
Mission	5,388	1.8	51.83
Mountain Island	207,502	62.0	90.56
Nantahala	270,145	50.0	99.03
Ninety-Nine Islands	83,267	15.2	91.67
Oxford	107,478	40.0	38.56
Queens Creek	4,621	1.4	99.89
Rhodhiss	119,297	33.5	94.18
Rocky Creek	-73	3.0	0.00
Tennessee Creek	48,111	9.8	93.76
Thorpe	96,019	19.7	93.15
Tuckasegee	7,077	2.5	85.11
Tuxedo	33,861	6.4	96.21
Wateree	336,004	85.0	81.96
Wylie	175,810	72.0	55.96
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	1,447,036	1,360.0	65.67
Jocassee	1,204,730	780.0	92.99
Energy for Pumping			
Bad Creek	-1,838,591		
Jocassee	-1,342,401		
Net Generation			
Bad Creek	-391,555		
Jocassee	-137,671		

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January 2018 through December 2018
Pre-commercial Combined Cycle Units

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first month a station is in commercial operation. During the months identified, Lee CC produced pre-commercial generation.

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
January 2018					
Lee	11	-10	n/a	n/a	n/a
Lee	12	-11	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-21	n/a	n/a	n/a
February 2018					
Lee	11	-1,575	n/a	n/a	n/a
Lee	12	-1,120	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-2,695	n/a	n/a	n/a
March 2018					
Lee	11	25,973	n/a	n/a	n/a
Lee	12	14,939	n/a	n/a	n/a
Lee	ST10	-1,349	n/a	n/a	n/a
Lee	Block Total	39,563	n/a	n/a	n/a
April 1 - 4					
Lee	11	14,158	n/a	n/a	n/a
Lee	12	6,771	n/a	n/a	n/a
Lee	ST10	8,994	n/a	n/a	n/a
Lee	Block Total	29,923	n/a	n/a	n/a
Total		66,771			

Note: Detail amounts may not add to totals shown due to rounding.

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

Period: December, 2018

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Oconee	1	11/30/2018 - 12/08/2018	177.87	Unscheduled	1B2 reactor coolant pump seal leakage	Failure of reactor coolant pump seal	Replaced reactor coolant pump seal
	2	None					
	3	None					
McGuire	1	None					
	2	None					
Catawba	1	11/17/2018 - 12/11/2018	255.70	Scheduled	End-of-cycle 24 refueling outage	Planned refueling outage	Refueling outage in progress
	2	None					

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Belews Creek Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1	12/3/2018 5:37:00 PM To 12/6/2018 5:07:00 AM	Unsch	1070	Second Reheater Leaks	HRH Leak on 9th floor. P17 Tube 7,8,9,10,11 and 12, P18 Tubes 10,11 and 12.	
1	12/22/2018 6:00:00 PM To 12/23/2018 2:55:00 PM	Sch	1000	Furnace Wall Leaks	Furnace wall leak on 6th floor.	
1	12/26/2018 7:00:00 AM To 1/1/2019 12:00:00 AM	Sch	8110	Wet Scrubber - Spray Nozzles	1B Absorber agitator and mist eliminator header repairs.	
2	9/8/2018 3:00:00 AM To 12/8/2018 12:00:00 AM	Sch	4520	Gen. Stator Windings; Bushings; And Terminals	Unit 2 fall outage for SSH replacement, LP Generator rewind and CCP final ties.	
2	12/8/2018 12:00:00 AM To 12/13/2018 3:23:00 AM	Sch	3999	Other Miscellaneous Balance Of Plant Problems	Fuel oil fire from replaced accumulator, 2B SAH Rub from new seals,200-2 not wired.	
2	12/14/2018 10:41:00 AM To 12/16/2018 11:54:00 PM	Unsch	8499	Other Miscellaneous Wet Scrubber Problems	FGD Stack doors left open and could not be closed online.	
2	12/27/2018 9:34:00 PM To 12/31/2018 9:30:00 PM	Sch	1492	Air Heater Fouling (Tubular)	Unit 2 PAH plugged and unable to make mill temps.	

Buck Combined Cycle Station

No Outages at Baseload Units During the Month.

Dan River Combined Cycle Station

No Outages at Baseload Units During the Month.

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Marshall Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
4	12/7/2018 9:58:00 PM To 12/15/2018 4:00:00 PM	Sch	1493	Air Heater Fouling (Regenerative)	APH Wash.	
4	12/18/2018 8:00:00 AM To 12/20/2018 5:00:00 PM	Sch	0890	Bottom Ash Systems (Wet or Dry)	Bottom Ash Hopper Seal Trough Repairs.	

WS Lee Combined Cycle

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
WS Lee CC ST 10	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	Trip due to low lube oil in reservoir.	
WS Lee CC ST 10	12/22/2018 12:10:00 AM To 12/22/2018 1:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC ST 10	12/22/2018 1:53:00 AM To 12/22/2018 11:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC ST 10	12/22/2018 11:42:00 AM To 12/22/2018 2:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC GT 11	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.	
WS Lee CC GT 11	12/21/2018 6:30:00 AM To 12/21/2018 10:00:00 AM	Sch	3352	Feedwater Chemistry	Shut down due to water chemistry/vac.	
WS Lee CC GT 12	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.	

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

December 2018
Oconee Nuclear Station

	Unit 1		Unit 2		Unit 3	
(A) MDC (mW)	847		848		859	
(B) Period Hours	744		744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	481,371	76.39	648,846	102.84	652,031	102.02
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	150,653	23.91	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-1,856	-0.30	-17,934	-2.84	-12,935	-2.02
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	630,168	100.00%	630,912	100.00%	639,096	100.00%
(K) Equivalent Availability (%)		75.43		100.00		100.00
(L) Output Factor (%)		100.39		102.84		102.02
(M) Heat Rate (BTU/NkWh)		10,230		10,050		10,001

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

December 2018
McGuire Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	1158		1158	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	891,451	103.47	886,748	102.92
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-29,899	-3.47	-25,196	-2.92
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	861,552	100.00%	861,552	100.00%
(K) Equivalent Availability (%)		100.00		100.00
(L) Output Factor (%)		103.47		102.92
(M) Heat Rate (BTU/NkWh)		9,869		9,923

* Estimate
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

December 2018
Catawba Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	1160		1150	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	552,976	64.07	867,746	101.42
(D) Net mWh Not Gen due to Full Schedule Outages	296,612	34.37	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	13,307	1.54	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	145	0.02	-12,146	-1.42
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	863,040	100.00%	855,600	100.00%
(K) Equivalent Availability (%)		63.35		100.00
(L) Output Factor (%)		97.63		101.42
(M) Heat Rate (BTU/NkWh)		10,134		9,967

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	404,610	176,233
(D) Capacity Factor (%)	48.99	21.34
(E) Net mWh Not Generated due to Full Scheduled Outages	175,287	429,921
(F) Scheduled Outages: percent of Period Hrs	21.23	52.06
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	66,045	67,951
(J) Forced Outages: percent of Period Hrs	8.00	8.23
(K) Net mWh Not Generated due to Partial Forced Outages	3,159	45,010
(L) Forced Derates: percent of Period Hrs	0.38	5.45
(M) Net mWh Not Generated due to Economic Dispatch	176,739	106,725
(N) Economic Dispatch: percent of Period Hrs	21.40	12.92
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	70.39	34.26
(Q) Output Factor (%)	85.98	54.19
(R) Heat Rate (BTU/NkWh)	9,236	10,647

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	129,223	129,215	169,760	428,198
(D) Capacity Factor (%)	84.31	84.31	73.13	79.49
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	5,952	5,952
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	2.56	1.10
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	24,041	24,049	56,416	104,506
(N) Economic Dispatch: percent of Period Hrs	15.69	15.69	24.30	19.40
(O) Net mWh Possible in Period	153,264	153,264	232,128	538,656
(P) Equivalent Availability (%)	100.00	100.00	97.44	98.90
(Q) Output Factor (%)	85.29	86.03	73.13	80.21
(R) Heat Rate (BTU/NkWh)	9,945	9,739	1,661	6,599

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	130,730	122,378	166,308	419,416
(D) Capacity Factor (%)	88.30	82.66	69.85	78.51
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	17,326	25,678	71,772	114,776
(N) Economic Dispatch: percent of Period Hrs	11.70	17.34	30.15	21.49
(O) Net mWh Possible in Period	148,056	148,056	238,080	534,192
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	89.45	88.83	71.12	81.01
(R) Heat Rate (BTU/NkWh)	10,412	10,566	1,784	7,036

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	250,510	51,399
(D) Capacity Factor (%)	51.17	10.47
(E) Net mWh Not Generated due to Full Scheduled Outages	0	160,402
(F) Scheduled Outages: percent of Period Hrs	0.00	32.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	239,042	279,239
(N) Economic Dispatch: percent of Period Hrs	48.83	56.87
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	100.00	67.33
(Q) Output Factor (%)	51.17	46.92
(R) Heat Rate (BTU/NkWh)	9,867	10,142

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
December 2018

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	65,805	67,050	82,122	214,977
(D) Capacity Factor (%)	39.66	40.41	32.75	36.90
(E) Net mWh Not Generated due to Full Scheduled Outages	781	0	0	781
(F) Scheduled Outages: percent of Period Hrs	0.47	0.00	0.00	0.13
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	90,519	90,519	140,922	321,961
(J) Forced Outages: percent of Period Hrs	54.56	54.56	56.21	55.27
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,807	8,343	27,684	44,834
(N) Economic Dispatch: percent of Period Hrs	5.31	5.03	11.04	7.70
(O) Net mWh Possible in Period	165,912	165,912	250,728	582,552
(P) Equivalent Availability (%)	44.97	45.44	43.79	44.60
(Q) Output Factor (%)	91.32	94.95	83.12	89.03
(R) Heat Rate (BTU/NkWh)	9,815	9,566	2,061	6,775

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas
Intermediate Power Plant Performance Review Plan
December 2018

		Cliffside Station Cliffside 6
(A)	**MDC (mW)**	844
(B)	**Period Hrs**	744
(C)	**Net Generation (mWh)**	383,291
(D)	**Net mWh Possible in Period**	627,936
(E)	**Equivalent Availability (%)**	87.46
(F)	**Output Factor (%)**	69.10
(G)	**Capacity Factor (%)**	61.04

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Peaking Power Plant Performance
Review Plan
December 2018

	Cliffside Station Unit 5
(A) MDC (mW)	546
(B) Period Hrs	744
(C) Net Generation (mWh)	113,103
(D) Net mWh Possible in Period	406,224
(E) Equivalent Availability (%)	80.73
(F) Output Factor (%)	74.07
(G) Capacity Factor (%)	27.84

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

January 2018 - December 2018
Oconee Nuclear Station

	Unit 1		Unit 2		Unit 3	
(A) MDC (mW)	847		848		859	
(B) Period Hours	8760		8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	6,745,635	90.91	7,581,168	102.06	6,967,442	92.59
(D) Net mWh Not Gen due to Full Schedule Outages	524,378	7.07	0	0.00	582,288	7.74
* (E) Net mWh Not Gen due to Partial Scheduled Outages	29,529	0.40	347	0.00	46,294	0.62
(F) Net mWh Not Gen due to Full Forced Outages	184,787	2.49	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-64,608	-0.87	-153,035	-2.06	-71,184	-0.95
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	7,419,720	100.00%	7,428,480	100.00%	7,524,840	100.00%
(K) Equivalent Availability (%)		89.94		100.00		92.12
(L) Output Factor (%)		100.52		102.06		100.36
(M) Heat Rate (BTU/NkWh)		10,233		10,127		10,102

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

January 2018 - December 2018
McGuire Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	1158		1158	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	10,359,250	102.12	9,502,818	93.68
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	791,628	7.80
* (E) Net mWh Not Gen due to Partial Scheduled Outages	796	0.01	28,506	0.28
(F) Net mWh Not Gen due to Full Forced Outages	34,991	0.34	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-250,957	-2.47	-178,872	-1.76
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	10,144,080	100.00%	10,144,080	100.00%
(K) Equivalent Availability (%)		99.56		91.80
(L) Output Factor (%)		102.47		101.61
(M) Heat Rate (BTU/NkWh)		9,957		10,015

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant Performance Review Plan

January 2018 - December 2018
Catawba Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	1160		1150	
(B) Period Hours	0		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	9,510,487	102.28	9,269,228	92.01
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	777,783	7.72
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	76,740	0.76
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00	-49,751	-0.49
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	0	100.00%	10,074,000	100.00%
(K) Equivalent Availability (%)		95.52		91.84
(L) Output Factor (%)		100.33		99.71
(M) Heat Rate (BTU/NkWh)		10,098		10,048

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January, 2018 through December, 2018

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	4,793,474	3,227,943
(D) Capacity Factor (%)	49.30	33.20
(E) Net mWh Not Generated due to Full Scheduled Outages	747,659	2,689,881
(F) Scheduled Outages: percent of Period Hrs	7.69	27.66
(G) Net mWh Not Generated due to Partial Scheduled Outages	1,040	740
(H) Scheduled Derates: percent of Period Hrs	0.01	0.01
(I) Net mWh Not Generated due to Full Forced Outages	311,892	173,216
(J) Forced Outages: percent of Period Hrs	3.21	1.78
(K) Net mWh Not Generated due to Partial Forced Outages	100,192	86,443
(L) Forced Derates: percent of Period Hrs	1.03	0.89
(M) Net mWh Not Generated due to Economic Dispatch	3,769,344	3,545,377
(N) Economic Dispatch: percent of Period Hrs	38.76	36.46
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	88.06	69.66
(Q) Output Factor (%)	73.99	67.36
(R) Heat Rate (BTU/NkWh)	9,305	9,599

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January, 2018 through December, 2018

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,463,456	1,471,968	2,237,637	5,173,061
(D) Capacity Factor (%)	81.10	81.57	81.87	81.57
(E) Net mWh Not Generated due to Full Scheduled Outages	61,021	56,502	58,692	176,215
(F) Scheduled Outages: percent of Period Hrs	3.38	3.13	2.15	2.78
(G) Net mWh Not Generated due to Partial Scheduled Outages	139,166	139,968	28,219	307,353
(H) Scheduled Derates: percent of Period Hrs	7.71	7.76	1.03	4.85
(I) Net mWh Not Generated due to Full Forced Outages	4,003	354	806	5,163
(J) Forced Outages: percent of Period Hrs	0.22	0.02	0.03	0.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	277	277
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	136,914	135,768	407,489	680,170
(N) Economic Dispatch: percent of Period Hrs	7.59	7.52	14.91	10.72
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,733,120	6,342,240
(P) Equivalent Availability (%)	88.68	89.09	96.78	92.29
(Q) Output Factor (%)	84.66	84.85	84.14	84.49
(R) Heat Rate (BTU/NkWh)	10,221	9,937	2,440	6,774

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January, 2018 through December, 2018

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,433,925	1,410,200	2,118,133	4,962,258
(D) Capacity Factor (%)	82.26	80.90	75.56	78.90
(E) Net mWh Not Generated due to Full Scheduled Outages	97,347	105,218	156,480	359,045
(F) Scheduled Outages: percent of Period Hrs	5.58	6.04	5.58	5.71
(G) Net mWh Not Generated due to Partial Scheduled Outages	132,928	132,170	5,760	270,858
(H) Scheduled Derates: percent of Period Hrs	7.63	7.58	0.21	4.31
(I) Net mWh Not Generated due to Full Forced Outages	7,068	9,462	11,920	28,450
(J) Forced Outages: percent of Period Hrs	0.41	0.54	0.43	0.45
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	67,418	67,418
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.41	1.07
(M) Net mWh Not Generated due to Economic Dispatch	71,972	86,190	443,489	601,650
(N) Economic Dispatch: percent of Period Hrs	4.13	4.94	15.82	9.57
(O) Net mWh Possible in Period	1,743,240	1,743,240	2,803,200	6,289,680
(P) Equivalent Availability (%)	86.38	85.84	91.38	88.46
(Q) Output Factor (%)	87.94	87.41	80.83	84.62
(R) Heat Rate (BTU/NkWh)	10,614	10,673	2,397	7,123

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January, 2018 through December, 2018

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	3,176,205	3,675,692
(D) Capacity Factor (%)	55.10	63.58
(E) Net mWh Not Generated due to Full Scheduled Outages	372,746	501,545
(F) Scheduled Outages: percent of Period Hrs	6.47	8.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	2,091	12,896
(H) Scheduled Derates: percent of Period Hrs	0.04	0.22
(I) Net mWh Not Generated due to Full Forced Outages	95,739	81,433
(J) Forced Outages: percent of Period Hrs	1.66	1.41
(K) Net mWh Not Generated due to Partial Forced Outages	145,499	69,994
(L) Forced Derates: percent of Period Hrs	2.52	1.21
(M) Net mWh Not Generated due to Economic Dispatch	1,971,800	1,440,040
(N) Economic Dispatch: percent of Period Hrs	34.21	24.91
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	89.31	88.48
(Q) Output Factor (%)	68.89	75.74
(R) Heat Rate (BTU/NkWh)	9,553	9,406

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January, 2018 through December, 2018

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	6,601	6,601	6,601	6,601
(C) Net Generation (mWh)	1,030,538	1,090,492	1,402,639	3,523,669
(D) Capacity Factor (%)	70.01	74.08	63.05	68.17
(E) Net mWh Not Generated due to Full Scheduled Outages	200,652	187,320	291,168	679,140
(F) Scheduled Outages: percent of Period Hrs	13.63	12.73	13.09	13.14
(G) Net mWh Not Generated due to Partial Scheduled Outages	27,459	28,514	67,117	123,090
(H) Scheduled Derates: percent of Period Hrs	1.87	1.94	3.02	2.38
(I) Net mWh Not Generated due to Full Forced Outages	138,565	122,014	167,641	428,220
(J) Forced Outages: percent of Period Hrs	9.41	8.29	7.54	8.29
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	74,809	43,683	295,972	414,464
(N) Economic Dispatch: percent of Period Hrs	5.08	2.97	13.30	8.02
(O) Net mWh Possible in Period	1,472,023	1,472,023	2,224,537	5,168,583
(P) Equivalent Availability (%)	75.09	77.05	76.36	76.19
(Q) Output Factor (%)	96.75	98.41	85.00	92.16
(R) Heat Rate (BTU/NkWh)	10,365	10,240	1,646	6,855

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Duke Energy Carolinas
Base Load Power Plant
Performance Review Plan
January 2018 through December 2018

Pre-Commercial
Lee Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)				
(B) Period Hrs				
(C) Net Generation (mWh)	38,546	20,580	7,645	66,771
(D) Capacity Factor (%)				
(E) Net mWh Not Generated due to Full Scheduled Outages				
(F) Scheduled Outages: percent of Period Hrs				
(G) Net mWh Not Generated due to Partial Scheduled Outages				
(H) Scheduled Derates: percent of Period Hrs				
(I) Net mWh Not Generated due to Full Forced Outages				
(J) Forced Outages: percent of Period Hrs				
(K) Net mWh Not Generated due to Partial Forced Outages				
(L) Forced Derates: percent of Period Hrs				
(M) Net mWh Not Generated due to Economic Dispatch				
(N) Economic Dispatch: percent of Period Hrs				
(O) Net mWh Possible in Period				
(P) Equivalent Availability (%)				
(Q) Output Factor (%)				
(R) Heat Rate (BTU/NkWh)				

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first month a station is in commercial operation. Lee CC began commercial operations April 5, 2018.

Duke Energy Carolinas
Intermediate Power Plant
Performance Review Plan
January, 2018 through December, 2018

Cliffside Station

Units	Unit 6
(A) MDC (mW)	844
(B) Period Hrs	8,760
(C) Net Generation (mWh)	4,311,369
(D) Net mWh Possible in Period	7,393,440
(E) Equivalent Availability (%)	75.32
(F) Output Factor (%)	79.29
(G) Capacity Factor (%)	58.31

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Carolinas
Peaking Power Plant
Performance Review Plan
January, 2018 through December, 2018

Cliffside Station

Units	Unit 5
(A) MDC (mW)	546
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,243,104
(D) Net mWh Possible in Period	4,782,960
(E) Equivalent Availability (%)	60.18
(F) Output Factor (%)	71.78
(G) Capacity Factor (%)	25.99

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Proposed Nuclear Capacity Factor
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 1

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs	9,270,870	9,127,064	10,021,874	9,249,360	7,252,338	6,692,637	6,844,888	58,459,031
Cost (Gross of Joint Owners)	$ 57,728,557	$ 58,001,149	$ 60,167,863	$ 56,622,253	$ 46,212,440	$ 38,923,889	$ 39,841,317	357,497,468
$/MWh	6.2269	6.3549	6.0037	6.1217	6.3721	5.8159	5.8206	
Avg $/MWh		**6.1154**						
Cents per kWh		**0.6115**						

Sept 2019 - August 2020

MDC			
CATA_UN01	Catawba	MW	1,160.1
CATA_UN02	Catawba	MW	1,150.1
MCGU_UN01	McGuire	MW	1,158.0
MCGU_UN02	McGuire	MW	1,157.6
OCON_UN01	Oconee	MW	847.0
OCON_UN02	Oconee	MW	848.0
OCON_UN03	Oconee	MW	859.0
			7,179.8
Hours in month			8,760
Generation GWHs			
CATA_UN01	Catawba	GWh	9,271
CATA_UN02	Catawba	GWh	9,127
MCGU_UN01	McGuire	GWh	10,022
MCGU_UN02	McGuire	GWh	9,249
OCON_UN01	Oconee	GWh	7,252
OCON_UN02	Oconee	GWh	6,693
OCON_UN03	Oconee	GWh	6,845
			58,459
	Proposed Nuclear Capacity Factor		92.95%

DUKE ENERGY CAROLINAS **McGee Workpaper 2**
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied	9,098,465	9,020,036	9,081,995	9,078,858	6,785,334	6,793,345	6,881,466	56,739,499
Hours	8760	8760	8760	8760	8760	8760	8760	8760
MDC	1160.1	1150.1	1158.0	1157.6	847.0	848.0	859.0	7179.8
Capacity factor	89.53%	89.53%	89.53%	89.53%	91.45%	91.45%	91.45%	90.21%
Cost	$ 55,640,302	$ 55,160,685	$ 55,539,582	$ 55,520,397	$ 41,494,696	$ 41,543,686	$ 42,082,578	$ 346,981,926

Avg $/MWh **6.1154**
Cents per kWh **0.6115**

2013-2017	Capacity Rating	NCF Rating	Weighted Average	
Oconee 1	847.0	91.45	10.79%	
Oconee 2	848.0	91.45	10.80%	
Oconee 3	859.0	91.45	10.94%	
McGuire 1	1158.0	89.53	14.44%	
McGuire 2	1157.6	89.53	14.43%	
Catawba 1	1160.1	89.53	14.47%	
Catawba 2	1150.1	89.53	14.34%	
	7179.8		**90.21%**	Wtd Avg on Capacity Rating

DUKE ENERGY CAROLINAS **McGee Workpaper 3**
North Carolina Annual Fuel and Fuel Related Expense
North Carolina Generation and Purchased Power in MWhs
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Resource Type	Sept 2019 - August 2020	
NUC Total (Gross)	58,459,031	
COAL Total	18,355,203	
Gas CT and CC total (Gross)	20,821,617	
Run of River	4,839,425	
Net pumped Storage	(3,874,211)	
Total Hydro	965,214	
Catawba Joint Owners	(14,888,880)	
Lee CC Joint Owners	(878,400)	
DEC owned solar	184,444	
Total Generation		83,018,229
Purchases for REPS Compliance	1,204,212	
Qualifying Facility Purchases - Non-REPS compliance	1,275,248	
Other Purchases	66,854	
Allocated Economic Purchases	319,079	
Joint Dispatch Purchases	6,414,946	
	9,280,339	
Total Generation and Purchased Power		92,298,568
Fuel Recovered Through intersystem Sales	(687,755)	

DUKE ENERGY CAROLINAS **McGee Workpaper 4**
North Carolina Annual Fuel and Fuel Related Expense
Projected Fuel and Fuel Related Costs
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Resource Type	Sept 2019 - August 2020	
Nuclear Total (Gross)	$ 357,497,468	
COAL Total	570,050,837	
Gas CT and CC total (Gross)	503,184,086	
Catawba Joint Owner costs	(91,061,695)	
CC Joint Owner costs	(18,112,976)	
Reagents and gain/loss on sale of By-Products	24,959,649	Workpaper 9
Purchases for REPS Compliance - Energy	63,867,566	
Purchases for REPS Compliance Capacity	13,295,654	
Purchases of Qualifying Facilities - Energy	58,754,197	
Purchases of Qualifying Facilities - Capacity	14,874,084	
Other Purchases	2,029,948	
JDA Savings Shared	19,972,407	Workpaper 5
Allocated Economic Purchase cost	9,109,705	Workpaper 5
Joint Dispatch purchases	132,910,592	Workpaper 6
Total Purchases	314,814,153	
Fuel Expense recovered through intersystem sales	(16,986,301)	Workpaper 5
Total System Fuel and Fuel Related Costs	**$ 1,644,345,221**	

DUKE ENERGY CAROLINAS **McGee Workpaper 5**

North Carolina Annual Fuel and Fuel Related Expense
Projected Joint Dispatch Fuel Impacts
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Positive numbers represent costs to Rate Payers, Negative numbers represent removal of costs to ratepayers

	Allocated Economic Purchase Cost		Economic Sales Cost		Fuel Transfer Payment		JDA Savings Payment	
	DEP	DEC	DEP	DEC	DEP	DEC	DEP	DEC
9/1/2019	$ 475,131	$ 665,890	$ (169,265)	$ (112,397)	$ (10,444,194)	$ 10,444,194	$ (1,053,331)	$ 1,053,331
10/1/2019	$ 414,456	$ 591,080	$ (4,395)	$ (67,808)	$ (7,750,156)	$ 7,750,156	$ (1,182,598)	$ 1,182,598
11/1/2019	$ 950,625	$ 1,370,649	$ (419,575)	$ (61,033)	$ (15,340,171)	$ 15,340,171	$ (2,955,441)	$ 2,955,441
12/1/2019	$ 479,370	$ 692,032	$ (371,479)	$ (59,958)	$ (12,761,635)	$ 12,761,635	$ (1,792,678)	$ 1,792,678
1/1/2020	$ 730,828	$ 1,011,856	$ (1,806,953)	$ (2,697,340)	$ (1,005,527)	$ 1,005,527	$ 626,965	$ (626,965)
2/1/2020	$ 463,058	$ 655,004	$ (1,255,361)	$ (1,044,487)	$ (2,708,449)	$ 2,708,449	$ (215,029)	$ 215,029
3/1/2020	$ 426,687	$ 608,794	$ (409,836)	$ (356,416)	$ (9,719,397)	$ 9,719,397	$ (1,442,087)	$ 1,442,087
4/1/2020	$ 459,023	$ 693,091	$ (291,103)	$ (49,201)	$ (10,408,733)	$ 10,408,733	$ (2,336,142)	$ 2,336,142
5/1/2020	$ 531,216	$ 804,769	$ (483,810)	$ (86,028)	$ (13,269,047)	$ 13,269,047	$ (2,608,123)	$ 2,608,123
6/1/2020	$ 345,100	$ 504,336	$ (265,478)	$ (113,940)	$ (13,397,425)	$ 13,397,425	$ (2,137,472)	$ 2,137,472
7/1/2020	$ 587,846	$ 827,961	$ (399,661)	$ (463,252)	$ (12,439,738)	$ 12,439,738	$ (3,016,091)	$ 3,016,091
8/1/2020	$ 483,920	$ 684,244	$ (327,024)	$ (196,140)	$ (11,987,821)	$ 11,987,821	$ (1,860,381)	$ 1,860,381
Sept 19 - Aug 20	$ 9,109,705		$ (5,308,001)		$ 121,232,293		$ 19,972,407	

$ 132,910,592	Workpaper 6 - Transfer - Purchases
$ (11,678,300)	Workpaper 6 - Transfer - Sales
$ 121,232,293	Sept 19-Aug 20 Net Fuel Transfer Payment
$ (11,678,300)	Workpaper 6 - Transfer - Sales
$ (5,308,001)	Sept 19-Aug 20 Economic Sales Cost
$ (16,986,301)	**Total Fuel expense recovered through intersystem sales**

DUKE ENERGY CAROLINAS **McGee Workpaper 6**

North Carolina Annual Fuel and Fuel Related Expense

Projected Merger Payments

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

					purchase	sale			sale	purchase
	Transfer Projection		**Purchase Allocation Delta**		**Adjusted Transfer**		**Fossil Gen Cost**		**Pre-Net Payments**	
	PECtoDEC	**DECtoPEC**	**PEC**	**DEC**	**PECtoDEC**	**DECtoPEC**	**PEC**	**DEC**	**PECtoDEC**	**DECtoPEC**
9/1/2019	464,096	14,623	10,534	(10,534)	474,630	14,623	$ 22.64	$ 20.60	$ 301,261	$ 10,745,454
10/1/2019	406,906	75,054	8,370	(8,370)	415,276	75,054	$ 22.10	$ 19.03	$ 1,427,980	$ 9,178,136
11/1/2019	675,108	1,571	33,083	(33,083)	708,192	1,571	$ 21.71	$ 20.01	$ 31,436	$ 15,371,607
12/1/2019	564,868	22,814	2,716	(2,716)	567,583	22,814	$ 23.37	$ 22.13	$ 504,795	$ 13,266,429
1/1/2020	207,223	163,501	(7,592)	7,592	207,223	171,093	$ 25.26	$ 24.72	$ 4,228,626	$ 5,234,152
2/1/2020	232,255	123,728	(8,963)	8,963	232,255	132,692	$ 24.98	$ 23.30	$ 3,092,324	$ 5,800,773
3/1/2020	468,979	12,017	7,840	(7,840)	476,820	12,017	$ 20.80	$ 16.50	$ 198,232	$ 9,917,629
4/1/2020	580,234	41,238	(4,789)	4,789	580,234	46,027	$ 19.35	$ 17.80	$ 819,312	$ 11,228,046
5/1/2020	666,200	17,354	14,825	(14,825)	681,026	17,354	$ 19.93	$ 17.44	$ 302,581	$ 13,571,628
6/1/2020	739,202	5,870	4,470	(4,470)	743,672	5,870	$ 18.15	$ 16.50	$ 96,828	$ 13,494,252
7/1/2020	672,958	24,313	(279)	279	672,958	24,592	$ 19.09	$ 16.62	$ 408,669	$ 12,848,407
8/1/2020	642,936	17,040	12,142	(12,142)	655,079	17,040	$ 18.71	$ 15.63	$ 266,256	$ 12,254,078
Sept 19 - Aug 20	6,320,965	519,122	72,358	(72,358)	6,414,946	540,745			$ 11,678,300	$ 132,910,592
									Net Pre-Net Payments	$ 121,232,293

DUKE ENERGY CAROLINAS **McGee Workpaper 7**
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 92.95%
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 Forecast
Billed Sales Forecast
Sales Forecast - MWhs (000)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered generation	Adjusted Sales
North Carolina:				
	Residential	21,397,068		21,397,068
	General	23,127,702		23,127,702
	Industrial	12,939,285		12,939,285
	Lighting	253,942		253,942
	NC RETAIL	57,717,997	-	57,717,997
South Carolina:				
	Residential	6,427,468	78,602	6,506,070
	General	5,801,262	49,849	5,851,111
	Industrial	9,500,669	688	9,501,357
	Lighting	42,373	-	42,373
	SC RETAIL	21,771,772	129,139	21,900,911
Total Retail Sales				
	Residential	27,824,536	78,602	27,903,138
	General	28,928,964	49,849	28,978,813
	Industrial	22,439,954	688	22,440,642
	Lighting	296,315	-	296,315
	Retail Sales	79,489,769	129,139	79,618,908
	Wholesale	7,624,936	-	7,624,936
Projected System MWH Sales for Fuel Factor		87,114,705	129,139	87,243,844
NC as a percentage of total		**66.26%**		**66.16%**
SC as a percentage of total		24.99%		25.10%
Wholesale as a percentage of total		8.75%		8.74%
		100.00%		100.00%

SC Net Metering allocation adjustment

Total projected SC NEM MWhs	129,139	
Marginal fuel rate per MWh for SC NEM	$ 32.50	
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018	

System Fuel Expense	$ 1,644,345,221	McGee Exhibit 2 Schdule 1 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018	
Total Fuel Costs for Allocation	$ 1,648,542,239	

Reconciliation

	System	NC Retail Customers	Wholesale	South Carolina Retail	
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	$ 1,644,345,221				
QF and REPS Compliance Purchased Power - Capacity	$ 28,169,738				
Other fuel costs	$ 1,616,175,484				
SC Net Metering Fuel Allocation adjustment	$ 4,197,018				
Jurisdictional fuel costs after adj.	$ 1,620,372,501				
Allocation to states/classes		66.16%	8.74%	25.10%	
Jurisdictional fuel costs	$ 1,620,372,501	$ 1,072,038,447	$ 141,620,557	$ 406,713,498	67.04% Capacity Allocator
Direct Assignment of Fuel benefit to SC Retail	$ (4,197,018)		$ -	$ (4,197,018)	
Total system actual fuel costs	$ 1,616,175,484	$ 1,072,038,447	$ 141,620,557	$ 402,516,480	
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001			
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	$ 1,644,345,221	**$ 1,090,922,448**			
		Exh.2, Sch. 1 page 3			

DUKE ENERGY CAROLINAS **Revised McGee Workpaper 7a**
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 Forecast
Billed Sales Forecast - Normalized Test Period Sales
Sales Forecast - MWhs (000)

	Test Period Sales	Customer Growth Adjustment	Weather Adjustment	Remove impact of SC DERP Net Metered generation	Normalized Test Period Sales
North Carolina:					
NC RETAIL	59,480,703	242,974	(1,649,623)	-	58,074,054
South Carolina:					
SC RETAIL	21,918,532	96,319	(507,334)	129,139	21,636,656
Wholesale	9,088,393	80,403	(250,198)	-	8,918,598
Normalized System MWH Sales for Fuel Factor	90,487,628	419,697	(2,407,155)	129,139	88,629,309
NC as a percentage of total	**65.73%**				**65.52%**
SC as a percentage of total	24.22%				24.41%
Wholesale as a percentage of total	10.04%				10.06%
	100.00%				99.99%

SC Net Metering allocation adjustment

Total projected SC NEM MWhs	129,139
Marginal fuel rate per MWh for SC NEM	$ 32.50
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018

System Fuel Expense	$ 1,683,362,477	McGee Exhibit 2 Schedule 2 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018	
Total Fuel Costs for Allocation	$ 1,687,559,495	

Reconciliation

	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	$ 1,683,362,477			
QF and REPS Compliance Purchased Power - Capacity	$ 28,169,738			
Other fuel costs	$ 1,655,192,739			
SC Net Metering Fuel Allocation adjustment	$ 4,197,018			
Jurisdictional fuel costs after adj.	$ 1,659,389,757			
Allocation to states/classes		65.52%	10.06%	24.41%
Jurisdictional fuel costs	$ 1,659,389,757	$ 1,087,232,169	$ 166,934,610	$ 405,057,040
Direct Assignment of Fuel benefit to SC Retail	$ (4,197,018)		$ -	$ (4,197,018)
Total system actual fuel costs	$ 1,655,192,739	$ 1,087,232,169	$ 166,934,610	$ 400,860,022
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001		
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	$ 1,683,362,477	**$ 1,106,116,170**		
		Exh. 2, Sch 2 page 3		

DUKE ENERGY CAROLINAS **McGee Workpaper 7b**
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
NERC 5 Year Average Nuclear Capacity Factor of 90.21%
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 Forecast
Billed Sales Forecast
Sales Forecast - MWhs (000)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered generation	Adjusted Sales
North Carolina:				
	Residential	21,397,068		21,397,068
	General	23,127,702		23,127,702
	Industrial	12,939,285		12,939,285
	Lighting	253,942		253,942
	NC RETAIL	57,717,997	-	57,717,997
South Carolina:				
	Residential	6,427,468	78,602	6,506,070
	General	5,801,262	49,849	5,851,111
	Industrial	9,500,669	688	9,501,357
	Lighting	42,373	0	42,373
	SC RETAIL	21,771,772	129,139	21,900,911
Total Retail Sales				
	Residential	27,824,536	78,602	27,903,138
	General	28,928,964	49,849	28,978,813
	Industrial	22,439,954	688	22,440,642
	Lighting	296,315	-	296,315
	Retail Sales	79,489,769	129,139	79,618,908
	Wholesale	7,624,936	-	7,624,936
Projected System MWh Sales for Fuel Factor		87,114,705	129,139	87,243,844
NC as a percentage of total		**66.26%**		**66.16%**
SC as a percentage of total		24.99%		25.10%
Wholesale as a percentage of total		8.75%		8.74%
		100.00%		100.00%

SC Net Metering allocation adjustment

Total projected SC NEM MWhs	129,139	
Marginal fuel rate per MWh for SC NEM	$ 32.50	
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018	
System Fuel Expense	$ 1,676,309,949	McGee Exhibit 2 Schedule 3 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 4,197,018	
Total Fuel Costs for Allocation	$ 1,680,506,966	McGee Exhibit 2 Schedule 3 Page 3 of 3, Line 5

Reconciliation

	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	$ 1,676,309,949			
QF and REPS Compliance Purchased Power - Capacity	$ 28,169,738			
Other fuel costs	$ 1,648,140,211			
SC Net Metering Fuel Allocation adjustment	$ 4,197,018			
Jurisdictional fuel costs after adj.	$ 1,652,337,229			
Allocation to states/classes		66.16%	8.74%	25.10%
Jurisdictional fuel costs	$ 1,652,337,229	$ 1,093,186,310	$ 144,414,274	$ 414,736,644
Direct Assignment of Fuel benefit to SC Retail	$ (4,197,018)		$ -	$ (4,197,018)
Total system actual fuel costs	$ 1,648,140,211	$ 1,093,186,310	$ 144,414,274	$ 410,539,627
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001		
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	$ 1,676,309,949	**$ 1,112,070,311**		
		Exh. 2, Sch.3 page 3		

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Annualized Revenue
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 8

	January 2019 Actuals			Normalized Sales	
	Revenue	KWH Sales	Cents/ kwh	McGee EX 4	Total Annualized Revenues
	(a)	(b)	(a) / (b) *100 = (c)	(d)	(c) * (d) * 10
Residential	$ 217,323,443.93	2,194,230,798	9.9043	22,043,791	$ 2,183,285,633
General	$ 143,353,269.17	1,936,498,544	7.4027	23,487,580	$ 1,738,716,194
Industrial	$ 49,109,115.03	890,320,580	5.5159	12,454,944	$ 687,001,167
Total	$ 409,785,828.13	5,021,049,922		57,986,315	$ 4,609,002,994

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Reagents and ByProducts
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 9

Reagent and ByProduct projections

Date	Ammonia	Urea	Limestone	Magnesium hydroxide	Calcium Carbonate	**Reagent Cost**	**Gypsum (Gain)/ Loss**	**Ash (Gain)/Loss**	**Sale of By-Products (Gain)/Loss**
9/1/2019	$ 342,265	$ 77,914	$ 1,644,941	$ 215,442	$ 119,083	**$ 2,399,645**	$ 347,807	$ (20,361)	**$ 327,447**
10/1/2019	$ 203,263	$ 46,271	$ 976,890	$ 96,653	$ 59,479	**$ 1,382,556**	$ 222,691	$ (500)	**$ 222,191**
11/1/2019	$ 295,673	$ 67,308	$ 1,421,021	$ 141,587	$ 80,226	**$ 2,005,816**	$ 307,158	$ (14,173)	**$ 292,986**
12/1/2019	$ 280,685	$ 63,896	$ 1,348,984	$ 200,980	$ 105,495	**$ 2,000,040**	$ 253,684	$ (31,440)	**$ 222,244**
1/1/2020	$ 480,295	$ 109,336	$ 2,308,323	$ 235,514	$ 119,285	**$ 3,252,753**	$ 448,822	$ (51,070)	**$ 397,752**
2/1/2020	$ 455,643	$ 103,724	$ 2,189,841	$ 224,812	$ 115,218	**$ 3,089,236**	$ 426,261	$ (54,924)	**$ 371,337**
3/1/2020	$ 280,833	$ 63,929	$ 1,349,695	$ 197,989	$ 96,692	**$ 1,989,138**	$ 249,549	$ (49,646)	**$ 199,903**
4/1/2020	$ 112,329	$ 25,571	$ 539,858	$ 73,146	$ 41,882	**$ 792,786**	$ 114,210	$ (7,717)	**$ 106,493**
5/1/2020	$ 127,830	$ 29,100	$ 614,359	$ 89,834	$ 50,633	**$ 911,756**	$ 128,869	$ (9,205)	**$ 119,664**
6/1/2020	$ 116,620	$ 26,548	$ 560,481	$ 93,291	$ 51,598	**$ 848,537**	$ 114,157	$ (8,031)	**$ 106,126**
7/1/2020	$ 252,434	$ 57,465	$ 1,213,211	$ 193,957	$ 106,887	**$ 1,823,954**	$ 246,905	$ (18,748)	**$ 228,157**
8/1/2020	$ 228,139	$ 51,934	$ 1,096,445	$ 180,818	$ 101,250	**$ 1,658,586**	$ 225,313	$ (14,765)	**$ 210,548**
	$ 3,176,009	$ 722,995	$ 15,264,049	$ 1,944,022	$ 1,047,728	**$ 22,154,802**	$ 3,085,428	$ (280,581)	**$ 2,804,847**

Total Reagent cost and Sale of By-products **$ 24,959,649**

DUKE ENERGY CAROLINAS **McGee Workpaper 10**
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2017
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Line No.	Description	Forecast $	(over)/under Collection $	Total $
1	Amount in current docket	107,380,554	72,488,427	179,868,981
2	Amount in Sub 1163, prior year docket	129,739,014	25,206,674	154,945,688
3	Increase/(Decrease)	(22,358,461)	47,281,753	24,923,292
4	2.5% of 2018 NC revenue of $4,895,869,250.56			122,396,731
	Excess of purchased power growth over 2.5% of Revenue			0

	E-7 Sub 1190			
WP 4	Purchases for REPS Compliance - Energy	63,867,566	66.16%	42,254,782
WP 4	Purchases for REPS Compliance Capacity	13,295,654	67.04%	8,912,938
WP 4	Purchases	2,029,948	66.16%	1,343,014
WP 4	QF Energy	58,754,197	66.16%	38,871,777
WP 4	QF Capacity	14,874,084	67.04%	9,971,063
WP 4	Allocated Economic Purchase cost	9,109,705	66.16%	6,026,981
		161,931,154		107,380,554

	E-7 Sub 1163			
	Purchases for REPS Compliance	76,265,967	65.58%	50,015,221
	Purchases for REPS Compliance Capacity	16,389,786	66.39%	10,881,179
	Purchases	1,354,014	65.58%	887,962
	QF Energy	59,741,306	65.58%	39,178,348
	QF Capacity	13,954,158	66.39%	9,264,165
	Allocated Economic Purchase cost	29,753,184	65.58%	19,512,138
		197,458,415		129,739,014

DUKE ENERGY CAROLINAS **McGee Workpaper 10a**
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

2018	**Jan18**	**Feb18**	**Mar18**	**Apr18**	**May18**	**June 18**	**Jul18**	**Aug18**	**Sep18**	**Oct18**	**Nov18**	**Dec18**	**12 ME**
System KWH Sales - Sch 4, Adjusted	8,703,429,931	7,459,691,118	6,449,998,012	6,590,329,093	6,591,233,338	8,009,317,385	8,486,873,480	8,267,869,991	9,507,963,860	6,345,056,567	6,681,164,890	7,500,839,324	90,593,766,989
NC Retail KWH Sales - Sch 4	5,733,819,698	5,031,181,342	4,190,094,169	4,416,566,036	4,252,750,024	5,245,688,511	5,639,360,853	5,409,821,248	6,212,763,717	4,141,211,581	4,314,713,247	4,892,732,160	59,480,702,586
NC Retail % of Sales, Adjusted (Calc)	65.88%	67.44%	64.96%	67.02%	64.52%	65.49%	66.45%	65.43%	65.34%	65.27%	64.58%	65.23%	65.66%
NC retail production plant %	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%
Fuel and Fuel related component of purchased power													
System Actual $ - Sch 3 Fuel$:	$ 54,851,829	$ 19,768,561	$ 11,751,953	$ 8,971,622	$ 7,588,225	$ 7,853,735	$ 25,151,873	$ 24,971,461	$ 21,908,434	$ 27,821,901	$ 26,826,328	$ 40,057,563	$ 277,523,485
System Actual $ - Sch 3 Fuel-related$; Economic Purchases	18,300,781	2,407,886	1,331,655	1,356,382	1,684,418	1,881,586	2,920,154	3,759,304	6,703,809	4,827,502	6,105,374	13,849,586	$ 65,128,437
System Actual $ - Sch 3 Fuel-related$; Purchased Power for REPS Compliance	3,057,332	3,239,022	2,726,561	3,894,992	4,543,762	4,545,750	4,893,476	4,813,048	4,818,507	3,635,758	4,331,202	3,811,118	$ 48,310,528
System Actual$ - Sch 3 Fuel-related$; SC DERP	122	125	134	163	218	223	232	223	213	203	157	136	$ 2,149
System Acutal $ - Sch 3 Fuel-related$; HB589 purpa Purchases	1,692,902	2,049,413	2,053,505	2,531,173	2,424,811	2,829,385	2,716,750	2,487,659	2,471,326	2,042,872	2,089,973	1,712,356	$ 27,102,125
Total System Economic & QF$	77,902,966	27,465,007	17,863,808	16,754,332	16,241,434	17,110,679	35,682,485	36,031,695	35,902,289	38,328,236	39,353,034	59,430,759	418,066,724
Less:													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	$ 30,897,067	$ 15,346,230	$ 7,372,650	$ 7,540,311	$ 5,735,851	$ 6,332,102	$ 23,572,626	$ 21,641,030	$ 15,422,513	$ 23,414,464	$ 20,577,089	$ 28,953,467	$ 206,805,400
Total System Economic $ without Native Load Transfers	$ 47,005,899	$ 12,118,777	$ 10,491,158	$ 9,214,021	$ 10,505,583	$ 10,778,577	$ 12,109,859	$ 14,390,665	$ 20,479,776	$ 14,913,772	$ 18,775,945	$ 30,477,292	$ 211,261,324
NC Actual $ (Calc)	$ 30,967,487	$ 8,173,497	$ 6,815,342	$ 6,174,856	$ 6,778,340	$ 7,059,410	$ 8,046,764	$ 9,416,080	$ 13,382,046	$ 9,733,733	$ 12,125,553	$ 19,880,072	$ 138,553,178
Billed rate (¢/kWh):	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.1631	0.1921	0.1922	0.1922	
Billed $:	$ 4,979,550	$ 4,369,342	$ 3,638,897	$ 3,835,577	$ 3,693,311	$ 4,555,631	$ 4,897,517	$ 4,698,172	$ 10,132,031	$ 7,954,367	$ 8,291,468	$ 9,402,231	$ 70,448,093
(Over)/ Under $:	$ 25,987,937	$ 3,804,155	$ 3,176,444	$ 2,339,278	$ 3,085,029	$ 2,503,779	$ 3,149,247	$ 4,717,908	$ 3,250,015	$ 1,779,366	$ 3,834,085	$ 10,477,841	$ 68,105,086
Capacity component of purchased power													
System Actual $ - Capacity component of Cherokee County Cogen Purchases	$ 422,948	$ 422,948	$ 211,474	$ 211,474	$ 317,211	$ 1,374,581	$ 3,172,110	$ 3,116,270	$ 630,852	$ 211,474	$ 211,474	$ 211,474	$ 10,514,290
System Actual $ - Capacity component of Purchased Power for REPS Compliance	486,469	465,590	421,064	517,448	539,749	567,326	2,279,476	2,238,065	2,451,979	1,649,703	659,013	594,902	$ 12,870,784
System Actual $ - Capacity component of HB589 Purpa QF purchases	316,410	362,951	415,622	397,922	232,512	271,686	1,225,424	1,199,461	1,251,154	924,601	242,932	159,399	$ 7,000,074
System Actual $ - Capacity component of SC DERP	57	37	64	28	13	21	78	84	72	79	19	13	$ 565
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	$ 1,225,884	$ 1,251,526	$ 1,048,224	$ 1,126,872	$ 1,089,485	$ 2,213,614	$ 6,677,088	$ 6,553,880	$ 4,334,057	$ 2,785,857	$ 1,113,438	$ 965,788	$ 30,385,713
NC Actual $ (Calc) (1)	$ 828,210	$ 845,534	$ 708,183	$ 761,317	$ 736,059	$ 1,495,523	$ 4,511,056	$ 4,427,817	$ 2,928,099	$ 1,882,131	$ 752,241	$ 652,488	$ 20,528,657
Billed rate (¢/kWh):	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0289	0.0353	0.0353	0.0353	
Billed $:	$ 1,383,962	$ 1,214,368	$ 1,011,356	$ 1,066,019	$ 1,026,479	$ 1,266,143	$ 1,361,163	$ 1,305,759	$ 1,795,614	$ 1,462,023	$ 1,524,125	$ 1,728,304	$ 16,145,316
(Over)/Under $:	$ (555,752)	$ (368,834)	$ (303,173)	$ (304,702)	$ (290,420)	$ 229,380	$ 3,149,893	$ 3,122,057	$ 1,132,485	$ 420,108	$ (771,884)	$ (1,075,816)	$ 4,383,341
TOTAL (Over)/ Under $:	**$ 25,432,185**	**$ 3,435,322**	**$ 2,873,271**	**$ 2,034,577**	**$ 2,794,608**	**$ 2,733,159**	**$ 6,299,140**	**$ 7,839,965**	**$ 4,382,500**	**$ 2,199,474**	**$ 3,062,201**	**$ 9,402,025**	**$ 72,488,427**

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2017
Docket E-7, Sub 1190

McGee Workpaper 10b

2017	**Jan17**	**Feb17**	**Mar17**	**Apr17**	**May17**	**June 17**	**Jul17**	**Aug17**	**Sep17**	**Oct17**	**Nov17**	**Dec17**	**12 ME**
System KWH Sales - Sch 4, Adjusted	7,537,708,015	6,554,206,632	6,358,740,783	7,141,766,120	5,899,728,291	7,386,182,606	8,217,318,035	8,246,356,880	7,636,553,967	6,672,440,753	6,414,671,902	7,061,789,900	85,127,463,884
NC Retail KWH Sales - Sch 4	4,974,781,160	4,409,516,555	4,161,725,776	4,712,572,814	3,804,926,476	4,858,493,561	5,393,164,464	5,434,256,910	5,082,625,773	4,373,336,154	4,193,859,450	4,613,039,595	56,012,298,688
NC Retail % of Sales, Adjusted (Calc)	66.00%	67.28%	65.45%	65.99%	64.49%	65.78%	65.63%	65.90%	66.56%	65.54%	65.38%	65.32%	65.80%
NC retail production plant %	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%	67.09%
Fuel and Fuel related component of purchased power													
System Actual $ - Sch 3 Fuel$:	$ 14,477,669	$ 16,876,907	$ 10,096,048	$ 8,192,583	$ 9,721,355	$ 10,071,142	$ 12,026,892	$ 14,840,029	$ 18,993,838	$ 17,656,690	$ 22,489,529	$ 25,927,577	$ 181,370,259
System Actual $ - Sch 3 Fuel-related$; Economic Purchases	2,015,378	1,988,183	1,423,270	946,815	1,094,013	1,076,835	1,880,095	2,503,480	1,906,962	2,121,832	2,815,382	3,654,363	$ 23,426,608
System Actual $ - Sch 3 Fuel-related$; Purchased Power for REPS Compliance	2,453,055	2,550,377	3,307,695	4,043,976	3,816,768	4,301,618	4,300,868	4,332,085	3,902,317	3,805,061	3,655,861	2,991,972	$ 43,461,653
System Actual$ - Sch 3 Fuel-related$; SC DERP								(8,513)	242	225	208	147	$ (7,691)
System Acutal $ - Sch 3 Fuel-related$; HB589 purpa Purchases								2,942,527	2,459,473	2,447,053	2,384,629	2,150,732	$ 12,384,414
Total System Economic & QF$	18,946,102	21,415,467	14,827,013	13,183,374	14,632,136	15,449,595	18,207,855	24,609,608	27,262,832	26,030,861	31,345,609	$ 34,724,791	260,635,243
Less:													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	$ 10,063,655	$ 13,734,418	$ 7,330,149	$ 6,099,895	$ 7,828,909	$ 6,973,202	$ 9,283,031	$ 11,761,966	$ 17,022,958	$ 15,515,603	$ 18,675,689	$ 20,326,204	$ 144,615,679
Total System Economic $ without Native Load Transfers	$ 8,882,447	$ 7,681,049	$ 7,496,864	$ 7,083,479	$ 6,803,227	$ 8,476,393	$ 8,924,824	$ 12,847,642	$ 10,239,874	$ 10,515,258	$ 12,669,920	$ 14,398,587	$ 116,019,564
NC Actual $ (Calc)	$ 5,862,290	$ 5,167,630	$ 4,906,615	$ 4,674,111	$ 4,387,622	$ 5,575,614	$ 5,857,513	$ 8,466,452	$ 6,815,306	$ 6,892,044	$ 8,283,489	$ 9,405,725	$ 76,294,410
Billed rate (¢/kWh):	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.0868	0.0868	0.0868	0.0868	
Billed $:	$ 5,343,741	$ 4,736,553	$ 4,470,385	$ 5,062,086	$ 4,087,123	$ 5,218,829	$ 5,793,154	$ 5,837,295	$ 4,414,019	$ 3,798,034	$ 3,642,167	$ 4,006,205	$ 56,409,592
(Over)/ Under $:	$ 518,549	$ 431,076	$ 436,230	$ (387,975)	$ 300,499	$ 356,785	$ 64,358	$ 2,629,158	$ 2,401,287	$ 3,094,010	$ 4,641,322	$ 5,399,519	$ 19,884,818
Capacity component of purchased power													
System Actual $ - Capacity component of Cherokee County Cogen Purchases	$ 419,234	$ 419,233	$ 209,616	$ 209,616	$ 314,425	$ 1,362,507	$ 3,144,246	$ 3,144,246	$ 628,850	$ 209,616	$ 209,616	$ 209,616	$ 10,480,821
System Actual $ - Capacity component of Purchased Power for REPS Compliance	392,592	412,586	456,453	533,339	443,290	522,270	2,084,627	2,035,395	1,896,602	1,684,518	519,390	374,434	$ 11,355,496
System Actual $ - Capacity component of HB589 Purpa QF purchases							-	1,341,938	1,167,715	1,069,000	326,098	234,918	$ 4,139,669
System Actual $ - Capacity component of SC DERP								(4,510)	99	101	37	22	$ (4,251)
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	$ 811,826	$ 831,819	$ 666,069	$ 742,955	$ 757,715	$ 1,884,777	$ 5,228,873	$ 6,517,069	$ 3,693,266	$ 2,963,235	$ 1,055,141	$ 818,990	$ 25,971,735
NC Actual $ (Calc)	$ 544,694	$ 558,108	$ 446,898	$ 498,485	$ 508,388	$ 1,264,590	$ 3,508,308	$ 4,372,622	$ 2,477,994	$ 1,988,180	$ 707,946	$ 549,501	$ 17,425,714
Billed rate (¢/kWh):	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0241	0.0241	0.0241	0.0241	
Billed $:	$ 1,014,183	$ 898,945	$ 848,429	$ 960,728	$ 775,691	$ 990,476	$ 1,099,476	$ 1,107,854	$ 1,226,785	$ 1,055,585	$ 1,012,265	$ 1,113,442	$ 12,103,858
(Over)/Under $:	$ (469,489)	$ (340,837)	$ (401,531)	$ (462,243)	$ (267,302)	$ 274,114	$ 2,408,832	$ 3,264,768	$ 1,251,209	$ 932,595	$ (304,319)	$ (563,941)	$ 5,321,856
TOTAL (Over)/ Under $:													**$ 25,206,674**

DUKE ENERGY CAROLINAS **McGee Workpaper 11**
North Carolina Annual Fuel and Fuel Related Expense
Actual Sales by Jursidication - Subject to Weather
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190
MWhs

Line #	Description	Reference	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	% NC	% SC
1	Residential	Company Records	22,763,029	6,953,474	29,716,503	76.60	23.40
2	Total General Service	Company Records	24,162,007	5,800,354	29,962,361		
3	less Lighting and Traffic Signals		261,740	44,385	306,125		
4	General Service subject to weather		23,900,267	5,755,969	29,656,236	80.59	19.41
5	Industrial	Company Records	12,555,667	9,164,704	21,720,370	57.81	42.19
6	Total Retail Sales	1+2+5	59,480,703	21,918,532	81,399,234		
7	Total Retail Sales subject to weather	1+4+5	59,218,963	21,874,146	81,093,109	73.03	26.97

This does not exclude Greenwood and includes the impact of SC DERP net metering generation

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Weather Normalization Adjustment
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

REVISED McGee Workpaper 12

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL % To Total	NC RETAIL MWh	SC RETAIL % To Total	SC RETAIL MWh
	Residential						
1	Total Residential		(1,185,150)	76.60	(907,825)	23.40	(277,325)
	General Service						
2	Total General Service		(790,151)	80.59	(636,783)	19.41	(153,368)
	Industrial						
3	Total Industrial		(181,656)	57.81	(105,015)	42.19	(76,641)
4	Total Retail	L1+ L2+ L3	(2,156,957)		(1,649,623)		(507,334)
5	Wholesale		(250,198)				
6	Total Company	L4 + L5	(2,407,155)		(1,649,623)		(507,334)

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Weather Normalization Adjustment by Class by Month
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

REVISED McGee Workpaper 12

	Residential	Commercial	Industrial	
2018	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	
JAN	(218,136)	(35,856)	-	
FEB	(21,771)	(2,405)	(1,317)	
MAR	297,124	-	-	
APR	(74,206)	(16,924)	41,146	
MAY	7,286	(10,553)	3,908	
JUN	(349,703)	(195,436)	(108,358)	
JUL	(226,914)	(108,742)	(35,233)	
AUG	51,266	25,765	13,164	
SEP	(130,432)	(533,537)	(522,476)	
OCT	(295,132)	119,399	432,355	
NOV	(13,417)	(2,573)	(4,846)	
DEC	(211,114)	(29,290)	-	
Total	**(1,185,150)**	**(790,151)**	**(181,656)**	**(2,156,957)**

	Wholesale		
2018	TOTAL MWH ADJUSTMENT	Note:	**The Resale customers include:**
JAN	(85,191)	1	Concord
FEB	29,047	2	Dallas
MAR	(49,586)	3	Forest City
APR	(3,762)	4	Kings Mountain
MAY	(27,157)	5	Due West
JUN	(32,305)	6	Prosperity
JUL	(10,478)	7	Lockhart
AUG	(1,285)	8	Western Carolina University
SEP	(48,942)	9	City of Highlands
OCT	(5,595)	10	Haywood
NOV	1,645	11	Piedmont
DEC	(16,590)	12	Rutherford
		13	Blue Ridge
Total	**(250,198)**	14	Greenwood

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

Line	Estimation Method [1]	Rate Schedule	NC Proposed KWH [1] Adjustment	SC Proposed KWH Adjustment	Wholesale Proposed KWH Adjustment	Total Company
1	*Regression*	Residential	188,586,837	68,285,920		
2						
3		**General Service (excluding lighting):**				
4	*Customer*	General Service Small and Large	40,462,204	27,381,444		
5	*Regression*	Miscellaneous	(127,805)	272,435		
6		Total General	40,334,399	27,653,879		
7						
8		**Lighting:**				
9	*Regression*	T & T2 (GL/FL/PL/OL)2	(1,092,054)	1,005,314		
10	*Regression*	TS	(4,424)	(8,749)		
11		Total Lighting	(1,096,478)	996,565		
12						
13		**Industrial:**				
14	*Customer*	I - Textile	2,832,784	(1,947,494)		
15	*Customer*	I - Nontextile	12,316,671	1,330,441		
16		Total Industrial	15,149,455	(617,052)		
17						
18						
19		Total	242,974,212	96,319,312	80,403,406	419,696,930
					WP 13-2	

Notes:

[1] Two approved methods are used for estimating the growth adjustment depending on the class/schedule:

"Regression" refers to the use of Ordinary Least Squares Regression

"Customer" refers to the use of the Customer by Customer approach. See ND330 for further explanation

[2] T and T2 were combined due to North Carolina's FL & GL schedules being merged into OL & PL during the 12 month period.

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales-Wholesale
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

Calculation of Customer Growth Adjustment to KWH Sales - Wholesale

Line No.		Reference	
1	Total System Resale (kWh Sales)	Company Records	11,246,967,907
2	Less Intersystem Sales	Schedule 1	1,945,444,289
3	Total KWH Sales Excluding Intersystem Sales	L1 - L2	9,301,523,618
4	Residential Growth Factor	Line 8	0.8644
5	Adjustment to KWH's - Wholesale	L3 * L4 / 100	80,403,406
6	Total System Retail Residential kWh Sales	Company Records	29,716,502,591
7	2018 Proposed Adjustment KWH - Residential (NC+SC)	WP 13 1	256,872,757
8	Percent Adjustment	L7 / L6 * 100	0.8644

"RAC001": CarolinasOperating Revenue Report

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Coal Inventory Rider True-up Calculation
Docket E-7, Sub 1190

Workpaper 14

Line No.			2018 August	2018 September	2018 October	2018 November	2018 December	2019 January	Total to Date
1	Full Load Burn 35 day supply	Input	2,209,515	2,209,515	2,209,515				
2	Beginning Actual tons on hand (including Terminals and In-transit) - actual	Input	2,349,694	2,356,042	2,244,622				
3	Ending Actual tons on hand (including Terminals and In-transit) - actual	Input	2,356,042	2,244,622	2,347,399				
4	Average tons on hand	(L2 + L3)/2	2,352,868	2,300,332	2,296,010				
5	Coal tons in excess of 35 days	L4 - L1	143,353	90,817	86,495				
6	Price per ton	Input	$ 73.23	$ 73.23	$ 73.23				
7	Dollars in excess of 35 day supply	L5 * L6	$ 10,497,741	$ 6,650,537	$ 6,334,064				
8	Number of days supply	L4 / 63,129 tons	37	36	36				
9	Carrying cost percentage 8/1/2018-12/31/2018 (a) (b)		0.745623%	0.745623%	0.745623%				
10	Total system amount to recover	L7 * L9	$ 78,274	$ 49,588	$ 47,228				$ 175,090
11	NC allocation percentage	Input	66.6244%	66.6244%	66.6244%				66.6244%
12	Total NC retail amount to recover	L10 * L11	$ 52,149	$ 33,038	$ 31,466				$ 116,653
13	NC Actual $ Collected	Input	$ 8,997	$ 24,938	$ 18,962	$ 17,250	$ 11,647	$ 33	$ 81,827
14	GRT & Reg. Fee percentage	Input	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%
15	GRT and Reg Fee $'s To Back Out	L13 * L14	$ 13	$ 35	$ 26	$ 24	$ 16	$ 0	$ 114
16	Rider Excluding GRT & Reg Fee	L13 - L15	$ 8,984	$ 24,903	$ 18,936	$ 17,226	$ 11,631	$ 33	$ 81,712
17	(Over)/Under Collected - at current tax rate	L12 - L16	$ 43,165	$ 8,135	$ 12,530	$ (17,226)	$ (11,631)	$ (33)	$ 34,940
18	**(Over)/Under Collected - at future tax rate**	L19*(1-CTR)/(1-FTR)	**$ 43,016**	**$ 8,107**	**$ 12,486**	**$ (17,166)**	**$ (11,590)**	**$ (33)**	**$ 34,820**

Notes:
(a) Carrying costs exclude gross receipts tax and regulatory fee.
(b) Revised to reflect current state income tax apportionment percentages.

	(OVER)/UNDER BALANCE	CUMULATIVE BASIS FOR COMPUTING RETURN	MONTHLY DEFERRED INCOME TAX 0410.11 - (Current Tax Rate)	CUMULATIVE DEFERRED INCOME TAX	NET DEFERRED BALANCE AFTER-TAX	MONTHLY AFTER-TAX RETURN ON DEFERRAL (Interest)	CUMULATIVE AFTER-TAX INTEREST INCOME	GROSS UP OF "AFTER-TAX RETURN ON DEFERRAL" TO PRETAX STATUS 0421.64	CUMULATIVE GROSS PRETAX RETURN
Rate Case			**0.236686**			**0.005691**		**0.763314**	
Rates 1/01/2018 - 12/31/18			**0.236149**			**0.005692**		**0.763851**	
Rates 1/1/19 - current			**0.233503**			**0.005697**		**0.766498**	
BEGINNING BAL.	0	0	0			0	0	0	0
Aug-18	43,165	43,165	10,193	10,193	32,972	94	94	123	123
Sep-18	8,135	51,300	1,921	12,114	39,186	205	299	267	390
Oct-18	12,530	63,830	2,959	15,073	48,757	250	549	326	716
Nov-18	(17,226)	46,604	(4,068)	11,005	35,599	240	789	313	1,029
Dec-18	(11,631)	34,973	(2,747)	8,258	26,715	177	966	231	1,260
Jan-19	(33)	34,940	(8)	8,250	26,690	152	1,118	198	1,459
Feb-19	0	34,940	0	8,250	26,690	152	1,270	198	1,657
Mar-19	0	34,940	0	8,250	26,690	152	1,422	198	1,855
Apr-19	0	34,940	0	8,250	26,690	152	1,574	198	2,054
May-19	0	34,940	0	8,250	26,690	152	1,726	198	2,252
Jun-19	0	34,940	0	8,250	26,690	152	1,878	198	2,451
Jul-19	0	34,940	0	8,250	26,690	152	2,030	198	2,649
Aug-19	0	34,940	0	8,250	26,690	152	2,182	198	2,847
ENDING BALANCE	34,940	34,940	8,250	8,250	26,690	2,182	2,182	2,847	2,847

Total Under-Collection 37,667

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Supplemental Testimony, Exhibits and Workpapers of Witness Kimberly McGee, in Docket No. E-7, Sub 1190, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to parties of record.

This the 30th day of April, 2019.

Jack E. Jirak
Associate General Counsel
Duke Energy Corporation
P.O. Box 1551/NCRH 20
Raleigh, North Carolina 27602
(919) 546-3257
Jack.jirak@duke-energy.com